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ABSTRACT

Results of the 1981-82 recruiting trends survey conducted by Placement Services at Michigan State University are summarized. A cross-section of 428 businesses, industries, government agencies, and educational institutions were surveyed to determine trends in hiring new college graduates, expected starting salaries, campus recruiting activities, and other job market trends. It was found that graduates in certain fields, particularly engineering and computer science, will be in high demand, while the demand has leveled off or in some cases fallen off in some nontechnical fields. For example, in education, there is great demand for science and math teachers, while many elementary teachers cannot find jobs. Overall, the demand for graduates is expected to be about the same as last year, when 87 percent of the graduates found work within three months of graduation. Salary offers to new graduates are expected to be about 5.2 percent more than offers to June 1981 graduates. The highest starting salaries will be paid to chemical, electrical, and mechanical engineers, who will earn an average of more than \$22,000 per year. The lowest starting salary offers are expected for graduates from the social sciences, human ecology, education, hotel and restaurant, and communications fields (about \$14,000 to \$15,500, depending on the field). Master's degree graduates are expected to receive about \$23,200 as a starting salary and doctoral degree graduates are expected to be paid about \$27,300. Recruitment of minorities and geographical differences in overall findings are covered. Survey questions are included. (SW)

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RECRUITING TRENDS 1981-82

**A Study of 428 Businesses, Industries,
Government Agencies, and
Educational Institutions Employing
New College Graduates**

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Summary of
RECRUITING TRENDS 1981-82

A Study of 428 Businesses, Industries,
Government Agencies, and
Educational Institutions Employing
New College Graduates

This report is a summary of the eleventh annual Recruiting Trends survey conducted by Placement Services at Michigan State University for 1981-82. A cross section of 428 businesses, industries, government agencies, and educational institutions were surveyed for this study. The results include information about trends in hiring new college graduates, expected starting salaries, campus recruiting activities, and other related topics of interest to personnel directors, placement staff members, educators, career counselors, and students.

**JOB OUTLOOK FOR
GRADUATES OF 1981-82**

Nationally, the overall employment picture for new college graduates in 1981-82 is expected to remain approximately the same as last year, keeping in mind that last year was tight, but 87% of the graduates had jobs within 3 months after graduation. The greatest changes are expected for recruitment of minority college graduates where an increase of 3 to 4 percent is anticipated. For women graduates, master's degree graduates, and all new bachelor's degree graduates, the job market will remain approximately the same this year as last year. This strongly suggests that recessions do not affect the college graduate employment market as much as the market for those with less formal education. (Pages 8-13, 15-22, and 32-34.)

Demand by geographical area is more pronounced than heretofore and the job markets are more clearly defined geographically. The Sunbelt continues to be the growth area, the Midwest providing fewer opportunities than before. This has resulted in a shift of manpower, especially in technical disciplines from the Midwest to the West and Southwest. High technology, military oriented, and service industries provide the greatest increase in opportunities.

Anticipated demand and campus recruiting activity are expected to increase the most for computer science graduates. For these individuals, an increase of approximately 3 to 4 percent is anticipated. An increase of approximately 1 to 2 percent is expected for electrical engineers, mechanical engineers, engineers of all types, marketing/sales graduates, hotel restaurant and institution management graduates, and business graduates of all types. The slowest recruitment activity is expected for education, social science and liberal arts graduates. Demand is expected to remain approximately the same for all other academic majors prepared by colleges and universities. (Pages 5-7.)

Overall, college salaries will increase about 5.2%. This is less than the inflation rate and again indicates the devaluing of a college degree. This trend has been in evidence for over a decade. (Pages 23-25.)

The highest average starting salaries this year (1981-82) will be paid to chemical engineers (\$22,900), electrical engineers (\$22,450), and mechanical engineers (\$22,315). Next will come metallurgical engineers (\$21,137), civil engineers (\$20,915), computer science majors (\$19,763), and petroleum engineers (\$19,735). The lowest starting salary offers are expected for social science majors (\$14,112), human ecology graduates (\$14,579), education graduates (\$15,114), hotel restaurant and institution management graduates (\$15,195), and communications majors (\$15,514). (Pages 23-25.)

Master's degree graduates are expected to receive approximately \$23,203 as a starting salary, with the amount varying greatly by discipline. Doctoral degree graduates are expected to be paid \$27,375. Exceptions to the salary offers for master's and doctoral graduates will be MBA's with technical undergraduate degrees who will receive much higher starting salaries and also doctoral degree graduates in engineering fields. (Pages 23-25.)

CALCULATING STARTING SALARY OFFERS

When calculating starting salary offers for new college graduates, the surveyed organizations listed the candidate's academic major, past working experiences, and degree level as the most important factors. Other factors receiving some consideration were the individual's major grade point average, overall grade point average, aggressiveness, institution of preparation, and campus leadership activities. (Page 28.)

After an initial campus interview, candidates can expect to wait approximately 2 to 3 weeks before receiving a response from most of the surveyed employers. Most organizations recognize the importance of responding after campus interviews, since organizations that do not respond as matter of courtesy are viewed very unfavorably by graduating students. (Pages 29-30.)

PRE-RECRUITMENT ACTIVITIES

Reviewing resumes and credentials in placement offices is the most important pre-recruitment activity according to the surveyed employers. Next on their list were talking with the placement office staff members, participating in career days/fairs, seeking graduating students who have previously worked for their organizations, meeting with professors/staff members, visiting with students/student groups, sending graduates back to their campuses for recruiting and visits, and providing speakers for campus activities. (Page 31.)

CHOOSING A JOB

When choosing a job, according to employers, graduating students were most concerned about quality of life factors. Highest on their list of important factors, according to the surveyed employers, were interesting work, promotion and growth in the organization, and their supervisor's appreciation of work done. These factors were followed in importance by a feeling of being in on things, good wages, good working conditions, employers loyalty to employees, and job security. Obviously from this list, starting salaries are not always the most important considerations when graduating students choose jobs. (Page 45.)

SUCCESSFUL RECRUITMENT METHODS

When recruiting new college graduates, the surveyed employers indicated that campus interviewing was still the most successful method. Next on their list of methods was referrals from current employees of their organizations, job listings with placement offices, and write-in applications. Less successful but still beneficial, according to these employers, were referrals from college faculty members, walk-ins, and hires from cooperative education programs conducted by their organizations. The poorest results were obtained from referrals by community organizations and job listing with employment agencies. (Pages 47-49.)

TRAINING OF NEW EMPLOYEES

Training of new college hires is an important function according to most of the surveyed employers. On the average approximately 9 to 10 hours per week of training were given during the first 6 months on the job. Organizations providing the most training for new college hires were the military, merchandising and retail services, hotels/motels and recreational facilities, printing and publishing services, and utilities. Organizations providing the least training were education institutions. (Pages 36-37.)

MEASURING JOB PERFORMANCE

Getting results was the most important factor when evaluating the performance of new college hires, according to the surveyed employers. Beyond this factor, they evaluate an individual on their common sense, honesty and integrity, dependability, initiative, developed work habits/hard working, reliability, interpersonal skills, enthusiasm, and judgment skills. Also listed were motivation to achieve, adaptability, intelligence, decision-making skills, oral communications skills, energy level, problem-solving abilities, and attitude toward work ethic. Others included mental alertness, emotional control, flexibility, maturity, innovative ideas, and responsiveness. (Pages 38-40.)

Several professional activities were provided by organizations to their new college hires. These included on-the-job training, formal training by organization personnel, orientation sessions, and written materials provided by the employing organization. Less frequently provide were seminars by professional organizations and classes given by the employing organization. (Page 41.)

TURNOVER OF COLLEGE GRADUATES

The percentage of new college hires leaving the surveyed organizations within the first 3 months were approximately 3%. According to the surveyed employers, another 5% leave within the first 6 months, and another 9% within the first year. Within 3 years approximately 18% have left, and within 5 years approximately 28% have left. The percentages of engineering graduates leaving an organization were slightly lower. (Pages 42-43.)

PARITY FOR LIBERAL ARTS/SOCIAL SCIENCE MAJORS

The best salary and job classification benefits were received by liberal arts and social science majors who were employed with banking finance and insurance companies, educational institutions, electrical machinery and equipment companies, glass paper packaging and allied products companies, hotels motels and recreational facilities, and merchandising and retailing services. When working for these categories of employers, liberal arts and social science majors were able to reach parity in salary and job classification when compared with technical graduates five to ten years after graduation in many businesses. (Pages 50-51.)

EVALUATION OF RECRUITERS ON COLLEGE CAMPUSES

When evaluating the effectiveness of their recruiters on college campuses, the surveyed employers indicated that results were primarily measured by quality, numbers, retention, and success of individuals referred and hired by the recruiters. Other employers distributed opinion questionnaires to interviewees to collect their comments on the recruiter's effectiveness. Still other employers relied on informal feedback and opinions of interviewees, new hires, faculty/staff, and placement office personnel. Especially important to the surveyed employers when evaluating recruiters was the quality of public relations generated by these individuals. (Page 53.)

TIGHTER BUDGETS IN PLACEMENT OFFICES

Placement offices are experiencing tighter budgets. When rating suggestions for helping placement offices become self-supporting, if necessary, the surveyed employers suggested that placement offices seek contributions from employers and foundations as their strongest option. They disagreed that employers should be charged an established fee for each interviewing schedule on campus, that students should be charged for registering with placement offices, or that students should be charged for interviews held with employers. (Page 57.)

STARTING DISCUSSIONS OF CAREERS

Discussions of careers should begin as early as the eighth grade, according to the surveyed employers. Some suggested that discussion of careers should begin even earlier. (Page 58.)

PROBLEMS WITH CAMPUS RECRUITING

When listing their most persistent problems with college placement offices, the surveyed employers cited the lack of knowledge about careers and student's lack of preparation for interviewing as the most serious problems. Employers also listed poor interviewing facilities, problems with on-campus parking, insufficient and overloaded staffs and lack of organization and coordination. Getting the right students on their interviewing schedules was also mentioned. These employers were seeking the most skilled, realistic, highly-motivated, and confident individuals on their interviewing schedules. The employers wanted to see high achievers without being overwhelmed by unqualified candidates, while keeping peace at the placement offices and maintaining a respectable image on college campuses. These employers offered several other suggestions for improvement of placement services around the country. (Pages 55 and 59.)

WORK ENVIRONMENT AUTOMATION

According to trends in the work environment, it might be advantageous for high school and college students to take additional courses in computer sciences or data processing. Surveyed employers indicated that an increase of 5 to 6 percent was expected in the next 1 to 3 years in automated office processes. The greatest increases were expected in computer applications, an increase of 9 to 10 percent. Increases were also expected in word processing, electronic communications, and teleprocessing. (Page 46.)

TRENDS BY INDUSTRY TYPE

When measuring the change in campus recruiting activity by the surveyed employers this year (1981-82), service organizations indicated the highest increase (up 9-10%). Tire and rubber companies were next on the list (up 5-6%), but tire and rubber organizations have recruited very little in the last few years. The next highest increases were in food and beverage processing and restaurants (up 3-4%). Increases of 1-2% were expected in recruiting activity from hospitals and health services, automotive and mechanical equipment companies, motels, hotels, resorts and recreational facilities, construction and building manufacturers, glass, paper packaging and allied products, electronics and instruments, banking, finance, and insurance companies, and merchandising and retailing services. Decreases in campus recruiting activity were anticipated in agri-business and printing, publishing informational services organizations (down 3-4%). A decrease was also anticipated in aerospace and component parts organizations (down 1-2%). The remaining categories of employers anticipated approximately as much campus recruiting activity in 1981-82 as they conducted in 1980-81. (Pages 3-4, 12-13, 16-20.)

How many SALARIED employees (excluding clerical staff) are on the payroll of your organization? Absolute frequencies are listed for each answer on the first line, row percentages on the second line, column percentages on the third line, and percentages of total on the fourth line of each block.

Employer Category	Number of Salaried Employees					ROW TOTAL
	COUNT	1-99	100-999	1000-999	10000+	
	ROW PCT					
	TOT PCT					
ACCTNG	1	10 43.5 21.3 2.4	6 26.1 3.8 1.4	5 21.7 3.7 1.2	2 8.7 2.7 .5	23 5.5
AEROSPACE	2	0 0 0	2 18.2 1.3 0	6 54.5 4.4 1.4	3 27.3 4.1 1.7	11 2.7
AGRIBUS	3	2 20.0 4.3 5	5 50.0 3.2 1.2	1 10.0 .7 .2	2 20.0 2.7 .5	10 2.4
AUTO	4	1 7.7 2.1 .2	6 46.2 3.8 1.4	3 23.1 2.2 .7	3 23.1 4.1 .7	13 3.1
BANKING	5	6 16.7 12.8 1.4	13 36.1 8.2 3.1	12 33.3 8.8 2.9	5 13.9 6.8 1.2	36 8.7
CHEM	6	0 0 0	4 19.0 2.5 1.0	8 38.1 5.9 1.9	9 42.9 12.2 2.2	21 5.1
COMMUN	7	0 0 0 0	1 100.0 .6 .2	0 0 0 0	0 0 0 0	1 .2
CONSTRUC	8	2 12.5 4.3 5	4 25.0 2.5 1.0	8 50.0 5.9 1.9	2 12.5 2.7 .5	16 3.9
EDUC	9	1 2.1 2.1 2	31 66.0 19.6 7.5	14 29.8 10.5 3.4	1 2.1 1.4 .2	47 11.3
COMPTRS	10	1 7.1 2.1 .2	6 42.9 3.8 1.4	4 28.6 2.9 1.0	3 21.4 4.1 .7	14 3.4
ELECTRNC	11	1 4.3 2.1 .2	9 39.1 5.7 2.2	9 39.1 6.6 2.2	4 17.4 5.4 1.0	23 5.5
FOOD	12	7 33.3 14.9 1.7	9 42.9 5.7 2.2	3 14.3 2.2 .7	2 9.5 2.7 .5	21 5.1
GLASS	13	2 14.3 4.3 5	6 42.9 3.8 1.4	4 28.6 2.9 1.0	2 14.3 2.7 .5	14 3.4
GOVT	14	1 5.9 2.1 .2	5 26.3 3.2 1.2	8 42.1 5.9 1.9	5 26.3 6.8 1.2	19 4.6
HEALTH	15	1 12.5 2.1 2	4 50.0 2.5 1.0	2 25.0 1.5 .5	1 12.5 1.4 .2	8 1.9
HOTEL	16	1 9.1 2.1 2	6 54.5 3.8 1.4	3 27.3 2.2 .7	1 9.1 1.4 .2	11 2.7
MERCHNDS	17	2 8.3 4.3 5	12 50.0 7.8 2.9	6 25.0 4.4 1.4	4 16.7 5.4 1.0	24 5.8

Number of SALARIED employees (Continued)

Employer Category	Number of Salaried Employees					ROW TOTAL
	COUNT	1-99	100-999	1000-999	10000+	
	ROW COL TOT PCT PCT	1	2	3	4	
METAL	18	4 17.4 8.5 1.0	7 30.4 4.4 1.7	8 34.8 5.9 1.9	4 17.4 5.4 1.0	23 5.5
MILITARY	19	0 0 0 0	0 0 0 0	1 25.0 7 2	3 75.0 4.1 7	4 1.0
PETRO	20	1 6.3 2.1 2	2 12.3 1.3 5	6 37.5 4.4 1.4	7 43.8 9.5 1.7	16 3.9
PRINT	21	1 16.7 2.1 2	3 50.0 1.9 7	0 0 0 0	2 33.3 2.7 5	6 1.4
UTIL	22	0 0 0 0	5 22.7 3.2 1	12 54.5 8.8 2.9	5 22.7 6.8 1.2	22 5.3
RSRCH	23	2 11.8 4.3 5	9 52.8 5.7 2	6 35.3 4.4 1.4	0 0 0 0	17 4.1
SERVICE	24	0 0 0 0	0 0 0 0	2 100.0 1.5 5	0 0 0 0	2 5.2
TIRE	25	0 0 0 0	0 0 0 0	0 0 0 0	2 100.0 2.7 5	2 5.2
VOLUNT	26	1 50.0 2.1 2	0 0 0 0	1 50.0 7 2	0 0 0 0	2 5.2
DIVERS	27	0 0 0 0	3 33.3 1.9 7	4 44.4 2.9 1.0	2 22.2 2.7 5	9 2.2
COLUMN TOTAL		47 11.3	158 38.1	136 32.8	74 17.8	415 100.0

NUMBER OF MISSING OBSERVATIONS = 13

OBSERVATIONS: For the 1981-82 Recruiting Trends survey, a total of 428 employers responded. Of these 11.3% were education employers, 5.6% were government employers, including the military, and the remainder, 83.1%, were businesses and industries. Of the respondents 11.3% employed fewer than a hundred salaried individuals on their payrolls, 38.1% employed 100-1000 salaried employees, 32.8% employed 1,000-10,000 individuals, and 17.8% employed more than 10,000 salaried individuals on their payrolls.

In the LAST YEAR, what change, if any, has occurred in the number of SALARIED employees working for your organization? Absolute frequencies are listed for each answer on the first line and percentages on the second line. Answers are listed in mean score order from lowest to highest.

Employer Category	Mean Score	Increase						Decrease						Cases	
		75% or More	50-74%	25-49%	11-24%	6-10%	1-5%	Remain the Same	1-5%	6-10%	11-24%	25-49%	50-74%		75-100%
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Food, Beverage Processing, and Restaurants	5.6	0	0	2	3	5	4	7	1	0	0	0	0	0	22
Printing, Publishing & Informational Services	5.7	0	0	9.1	13.6	22.7	<u>18.2</u>	31.8	4.5	0.0	0.0	0.0	0.0	0.0	6
Military	5.7	0	0	0	0	1	2	0	0	0	0	0	0	0	3
Hospitals & Health Services	5.6	0	0	1	0	1	4	2	0	0	0	0	0	0	8
Diversified Conglomerate	5.9	0	0	12.5	0.0	12.5	<u>50.0</u>	25.0	0.0	0.0	0.0	0.0	0.0	0.0	9
Hotels, Motels, Resorts, Camps, Recreational Facilities	5.9	0	0	0	2	5	0	2	1	0	1	0	0	0	1
Merchandising & Related Services	6.0	0	1	0	0	7	12	3	2	1	0	0	0	0	26
Aerospace & Components	6.1	0	0	0	0	3	4	2	1	0	0	0	0	0	10
Electrical Machinery & Equip. (Computers)	6.1	1	0	0	3	4	6	5	3	0	0	0	0	1	23
Construction & Bldg. Materials Mfg.	6.3	0	0	0	3	3	4	3	1	0	2	0	0	0	18
Research and/or Consulting Services	6.3	0	0	1	2	3	4	3	4	0	0	1	0	0	18
Accounting	6.4	0	0	5.6	11.1	16.7	<u>22.2</u>	16.7	22.2	0.0	0.0	5.6	0.0	0.0	22
Metals & Metal Products	6.5	0	0	1	1	4	4	7	1	1	2	0	0	0	21
Banking, Finance, & Ins.	6.5	0	0	0	2	7	11	10	1	0	2	2	0	0	35
Glass, Paper, Packaging & Allied Products	6.6	0	0	0	1	4	2	3	3	0	0	1	0	0	14
Petroleum & Allied Products	6.7	0	0	0	1	3	6	3	0	0	2	1	0	0	16
Chemicals, Drugs, & Allied Products	6.7	0	0	0	0	2	13	<u>18.2</u>	2	0	1	0	0	1	20
Electrical Machinery & Equipment (Computers)	6.7	0	0	0	0	4	2	5	1	1	1	0	0	0	14
Agriculture	6.8	0	0	0	0	3	1	3	2	0	1	0	0	0	10
Tire & Rubber	7.0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
Public Utilities (Including Transportation)	7.0	0	0	1	0	5	4	5	3	0	2	1	0	1	22
Service Organizations (Boy Scouts, Red Cross)	7.5	0	0	0	0	0	1	0	0	1	0	0	0	0	2
Automotive & Mechanical Equipment	7.6	0	0	0	0	2	1	5	0	0	4	1	0	0	13
Governmental Administration	8.1	0	0	0	0	1	1	3	7	3	3	0	0	0	18
		0.0	0.0	0.0	0.0	5.6	5.6	16.7	<u>38.9</u>	16.7	16.7	0.0	0.0	0.0	

Number of SALARIED employees (Continued)

Employer Category	Mean Score	75% or More	50- 74%	Increase			1- 5%	Remain the Same	1- 5%	6- 10%	Decrease			50- 74%	75- 100%	Cases
				25- 49%	11- 24%	6- 10%					11- 24%	25- 49%	50- 74%			
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
Volunteer Organizations (Churches, Peace Corps)	8.5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2
Educational Institutions	8.6	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	46
Communication (Radio, TV & Newspapers)	9.0	0.0	0.0	0.0	0.0	2.2	8.7	8.7	39.1	13.0	15.2	6.5	4.3	2.2	0	1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
GRAND MEAN																

6.741

OBSERVATIONS: During the last year, the numbers of salaried employees working for the surveyed organizations have increased somewhat, 1 to 5%, in the following categories of organizations: food, beverage processing, and restaurant, printing, publishing, information services, military, diversified conglomerates, hotels motels resorts and recreational facilities, merchandising and retail services, aerospace and components, electronics and instruments, construction and building materials manufacturers, research and consulting services, and accounting. The greatest decreases in salaried employees, approximately 6 to 10 percent decline, were experienced in communications including radio, TV and newspapers, educational institutions, and volunteer organizations. Declines of 1 to 5 percent were experienced in government organizations, automotive and mechanical equipment organizations, and service organizations such as Boy Scouts and Red Cross. The remaining categories of employers remained approximately the same in numbers of salaried employees working for their organizations in the last year.

What percentage change, if any, do you anticipate in the number of **CAMPUSES VISITED** for recruiting by your organization in 1981-82?

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
INC 50+	1	6	1.4	1.5	1.5
INC 25-49	2	7	1.6	1.8	3.3
INC 11-24	3	16	3.7	4.1	7.4
INC 9-10	4	24	5.6	6.1	13.5
INC 7-8	5	7	1.6	1.8	15.3
INC 5-6	6	19	4.4	4.8	20.2
INC 3-4	7	16	3.7	4.1	24.2
INC 1-2	8	26	6.1	6.6	30.9
SAME	9	198	46.3	50.5	81.4
DEC 1-2	10	9	2.1	2.3	83.7
DEC 3-4	11	11	2.6	2.8	86.5
DEC 5-6	12	4	.9	1.0	87.5
DEC 7-8	13	5	1.2	1.3	88.8
DEC 9-10	14	16	3.7	4.1	92.9
DEC 11-24	15	10	2.3	2.6	95.4
DEC 25-49	16	9	2.1	2.3	97.7
DEC 50+	17	9	2.1	2.3	100.0
	0	16	3.7	MISSING	
OUT OF RANGE		20	4.7	MISSING	
	TOTAL	428	100.0	100.0	
MEAN	8.699				
VALID CASES	392				
	MISSING CASES	36			

OBSERVATION: To summarize the anticipated recruitment activity on college campuses during 1981-82, the surveyed employers expect to visit approximately as many campuses as they visited in 1980-81. Approximately 7.4% expect to increase their campus recruitment activity by 10% or more. Of the surveyed employers, 33% expect to increase their recruitment activities 1% or more. On the other hand, 7.2% expect to decrease their campus recruitment activities by 10% or more, and 15.6% expect to decrease their campus recruitment activities by 1% or more.

What percentage change, if any, do you anticipate in the number of CAMPUSES VISITED for recruiting by your organization in 1981-82? Absolute frequencies are listed for each answer on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest.

Categories of Employers	Mean Score	50% or More	25-49%	11-24%	Increase					Remain the Same	1-2%	3-4%	5-6%	7-8%	Decrease			50-100%	Cases
					9-10%	7-8%	5-6%	3-4%	1-2%						7-8%	9-10%	11-24%		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	
Service organizations (Boy Scouts, Red Cross)	4.0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Tire & Rubber	5.5	0.0	0.0	0.0	****	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
Food, Beverage Processing, and Restaurants	7.0	0	1	2	3	0	1	1	2	11	0	0	0	0	0	0	0	0	21
Hospitals & Health Services	7.7	0	0	0	1	1	0	0	1	3	1	0	0	0	0	0	0	0	7
Automotive & Mechanical Equipment	7.8	1	0	0	1	0	0	0	0	9	0	0	0	0	0	0	0	0	11
Hotels, Motels, Resorts, Camps, Recreational Facilities	7.9	0	2	0	1	0	0	0	2	4	0	0	0	1	0	0	1	0	11
Construction & Bldg. Materials Manufacturing	8.1	1	0	2	2	0	0	1	2	4	0	0	0	0	1	0	0	2	18
Glass, Paper, Packaging & Allied Products	8.2	0	1	1	0	1	0	1	1	3	1	0	0	0	2	0	0	0	11
Electronics & Instruments	8.3	1	1	1	1	0	2	0	1	12	0	0	0	0	2	0	1	0	22
Banking, Finance, & Ins.	8.3	0	0	2	0	2	2	4	15	0	0	1	0	0	0	0	2	0	34
Merchandising & Related Services (Retailing Indus.)	8.3	1	0	1	2	0	3	0	1	14	1	1	0	0	0	1	0	1	28
Metals & Metal Products	8.5	0	1	0	1	1	0	2	2	9	0	0	0	0	0	1	1	0	18
Chemicals, Drugs, & Allied Products	8.5	0	1	1	2	1	1	0	2	4	0	2	1	1	0	2	0	0	18
Diversified Conglomerate	8.6	0	0	1	0	0	0	0	0	7	0	1	0	0	0	0	0	0	9
Public Utilities (Including Transportation)	8.7	0	0	0	3	0	2	1	2	8	0	0	0	1	0	0	1	1	19
Electrical Machinery & Equip. (Computers)	8.7	1	0	0	1	0	2	0	1	5	0	0	0	0	2	1	0	0	14
Petroleum & Allied Products	8.9	0	0	1	1	0	3	0	1	6	0	0	0	1	2	1	0	0	16
Volunteer Organizations (Churches, Peace Corps)	9.0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Communication (Radio, TV & Newspapers)	9.0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Governmental Administration	9.2	0	0	2	0	0	2	0	0	11	0	0	0	0	0	1	0	2	18
Accounting	9.3	0	0	0	0	1	1	1	0	15	1	1	0	0	1	0	1	0	22
Research and/or Consulting Services	9.3	0	0	1	0	0	0	2	1	9	0	2	0	0	1	0	1	0	17
Military	9.3	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	3
		0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	

Number of CAMPUSES VISITED (Continued)

Categories of Employers	Mean Score	50% or More	25-49%	11-24%	Increase 9-10%	7-8%	5-6%	3-4%	1-2%	Remain the Same	1-2%	3-4%	5-6%	Decrease 7-8%	9-10%	11-24%	25-49%	50-100%	Cases
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	
Educational Institutions	9.4	1	0	0	0	0	0	0	2	30	2	2	0	1	2	0	0	1	41
Aerospace & Components	10.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	4.9	73.2	4.9	4.9	0.0	2.4	4.9	0.0	0.0	2.4	10
Printing, Publishing & Informational Services	10.7	0	0	0	0	0	0	0	0	3	1	0	1	0	0	1	0	0	6
Agribusiness	11.2	0	0	1	1	0	0	0	0	2	0	1	0	0	2	1	1	1	10
		0.0	0.0	10.0	10.0	0.0	0.0	0.0	0.0	20.0	0.0	10.0	0.0	0.0	20.0	10.0	10.0	10.0	

GRAND MEAN

8.681

OBSERVATIONS: When anticipating the change in numbers of campuses visited for recruiting by the surveyed organizations in 1981-82, service organizations indicated the highest increase in recruitment activity. They expect to visit approximately 9 to 10 percent more college campuses. This was followed by tire and rubber with an increase of 5 to 6 percent, but tire and rubber organizations have recruited very little in the last few years. The next highest increase was in food beverage processing and restaurants where an increase of 3 to 4 percent in recruitment activities was anticipated.

An increase of 1 to 2 percent was anticipated from hospitals and health services, automotive and mechanical equipment companies, hotels motels resorts and recreational facilities, construction and building manufacturers, glass paper packaging and allied products, electronics and instruments, banking, financing and insurance and merchandising and retailing services.

Decreases in campus recruiting activities were anticipated in agribusiness and printing publishing and informational services organizations, approximately 3 to 4 percent. A decrease of 1 to 2 percent was anticipated in aerospace and component parts.

The remaining categories of employers anticipated approximately as much campus recruitment activity in 1981-82 as they conducted during 1980-81.

What changes, if any, does your organization anticipate in the hiring of new college graduates for 1981-82?

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
INC 50+	1	9	2.1	3.5	3.5
INC 25-49	2	5	1.2	2.0	5.5
INC 11-24	3	18	4.2	7.1	12.5
INC 9-10	4	14	3.3	5.5	18.0
INC 7-8	5	4	.9	1.6	19.6
INC 5-6	6	11	2.6	4.3	23.9
INC 3-4	7	10	2.3	3.9	27.8
INC 1-2	8	16	3.7	6.3	34.1
SAME	9	130	30.4	51.0	85.1
DEC 1-2	10	5	1.2	2.0	87.1
DEC 3-4	11	3	.7	1.2	88.2
DEC 5-6	12	4	.9	1.6	89.8
DEC 7-8	13	2	.5	.8	90.6
DEC 9-10	14	5	1.2	2.0	92.5
DEC 11-24	15	8	1.9	3.1	95.7
DEC 25-49	16	5	1.2	2.0	97.6
DEC 50+	17	6	1.4	2.4	100.0
	0	153	36.2	MISSING	
OUT OF RANGE		18	4.2	MISSING	
	TOTAL	428	100.0	100.0	
MEAN	8.282				
VALID CASES	255	MISSING CASES	173		

OBSERVATIONS: When questioned about hiring new college graduates for 1981-82, the surveyed employers indicated that they would be hiring approximately the same numbers as they hired last year, at least at the bachelor's degree level. Approximately 34.1% will be increasing their hiring of new college graduates while 14.9% will be decreasing their hiring by 10% or more.

What changes, if any, does your organization anticipate in the hiring of new college graduates for 1981-82? Absolute frequencies are listed for each answer on the first line and percentages are listed on the second line. Answers for MASTER'S, DOCTORAL, MINORITIES, WOMEN, and ALL GRADUATES are listed in mean score order from lowest to highest.

[illegible]

OBSERVATIONS: For the surveyed employers who expect to hire minority candidates, an average increase of 3-4% is anticipated in the numbers hired for 1981-82. For women graduates, the surveyed employers expect to hire approximately 1-2% more. The same rate of hire, an average increase of 1-2%, is expected for master's degree candidates as well as all new college graduates with bachelor's degrees. Those employers hiring doctoral degree graduates expect to hire approximately the same this year as they hired last year.

What changes, if any, does your organization anticipate in the hiring of new college graduates for 1981-82? Absolute frequencies are listed for each answer on the first line and percentages are listed on the second line. Answers for INDIVIDUAL MAJORS are listed in mean score order from lowest to highest.

TYPES OF GRADUATES	MEAN SCORE	50% or More	25-49%	11-24%	Increase					Remain the Same	Decrease					Cases			
					9-10%	7-8%	5-6%	3-4%	1-2%		3-4%	5-6%	7-8%	9-10%	11-24%		25-49%	50-100%	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	CASES	
Computer Science	7.2	10	2	10	12	6	14	19	21	59	1	2	0	0	3	0	1	2	162
Elec. Engineering	7.7	6.2	1.2	6.2	7.4	3.7	8.6	11.7	13.0	36.4	.6	1.2	0.0	0.0	1.9	0.0	.6	1.2	164
Engineering	7.7	3.7	3.0	6.7	3.0	4.3	12.2	10.4	4.9	41.5	.6	1.8	.6	0.0	1.2	1.2	1.8	3.0	104
Mech. Engineering	8.0	3.8	6.7	2.9	5.8	3.8	4.8	6.7	5.8	50.0	0.0	2.9	1.0	1.0	1.0	0.0	1.9	1.9	172
Marketing	8.1	3.5	1.7	4.7	4.7	1.2	9.3	7.6	8.7	48.3	1.2	1.7	1.7	0.0	.6	.6	1.7	2.9	143
Hotel, Restaurant, Institutional Mgt.	8.2	3	0	2	5	1	1	2	3	43	0	1	2	0	0	1	0	1	65
Business	8.3	4.6	0.0	3.1	7.7	1.5	1.5	3.1	4.6	66.2	0.0	1.5	3.1	0.0	0.0	1.5	0.0	1.5	132
Accounting	8.6	4.5	.8	2.3	6.1	.8	3.0	3.0	4.5	65.2	1.5	2.3	1.5	0.0	2.3	0.0	.8	1.5	225
Metallurgy/Mat. Sci.	8.6	1.8	1.8	3.1	3.1	.4	4.9	3.1	9.3	60.0	1.8	2.2	2.2	.4	1.3	1.3	2.2	.9	85
Petroleum	8.6	2	2	2	4	0	3	6	4	52	0	3	1	0	1	0	1	4	49
Financial Admin.	8.7	0.0	0.0	4.1	4.1	0.0	4.1	2.0	2.0	77.6	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	157
General Business	8.7	2.5	1.3	1.9	2.5	.6	1.9	5.1	5.1	67.5	1.3	3.8	1.9	0.0	1.3	.6	1.9	.6	152
Mathematics	8.7	3	2	2	5	1	5	7	10	100	3	2	2	0	3	2	2	3	102
Chemical Engin.	8.8	2.0	1.3	1.3	3.3	.7	3.3	4.6	6.6	65.8	2.0	1.3	1.3	0.0	2.0	1.3	1.3	2.0	109
Personnel	8.8	0	2	0	2	2	3	3	11	70	2	3	1	0	0	1	1	1	132
Civil Engineering	8.8	0.0	2.0	0.0	2.0	2.0	2.9	2.9	10.8	68.6	2.0	2.9	1.0	0.0	0.0	1.0	1.0	1.0	103
Natural Sciences	9.0	2	2	3	2	2	5	8	8	61	1	3	2	1	1	2	2	4	68
Agriculture & Nat. Resources	9.0	1.8	1.8	2.8	1.8	1.8	4.6	7.3	7.3	56.0	.9	2.8	1.8	.9	.9	1.8	1.8	3.7	65
Retailing	9.0	3	0	1	4	0	3	3	17	88	1	3	3	0	2	1	2	1	132
Physics	9.1	1.3	0.0	.8	3.0	0.0	2.3	2.3	12.9	66.7	.8	2.3	2.3	0.0	1.5	.8	1.5	.8	103
Chemistry	9.1	2.0	1.0	1.0	2.9	1.0	1.9	6.8	6.8	68.0	0.0	1.9	1.0	0.0	2.9	1.0	1.0	1.9	68
Liberal Arts	9.1	0	0	1	1	3	1	2	7	70	0	2	1	0	3	1	1	2	66
Advertising	9.2	0.0	0.0	1.5	1.5	4.4	1.5	2.9	0.0	79.4	0.0	2.9	1.5	0.0	0.0	0.0	1.5	2.9	49
Education	9.2	1	1	2	2	1	0	2	2	46	0	1	1	0	0	3	0	3	65
		1.5	1.5	3.1	3.1	1.5	0.0	3.1	3.1	70.8	0.0	1.5	1.5	0.0	0.0	4.6	0.0	4.6	49
		2.0	0.0	0.0	6.1	0.0	2.0	0.0	8.2	65.3	2.0	4.1	4.1	0.0	2.0	0.0	2.0	2.0	80
		0	0	1	1	1	2	3	5	58	2	2	1	0	0	1	2	1	97
		0.0	0.0	1.3	1.3	1.3	2.5	3.8	6.3	72.5	2.5	2.5	1.3	0.0	0.0	1.3	2.5	1.3	102
		0	0	0	2	1	4	3	7	68	0	3	1	0	1	1	2	2	66
		0.0	0.0	0.0	2.1	1.0	4.1	5.2	7.2	70.1	0.0	3.1	1.0	0.0	1.0	1.0	2.1	2.1	84
		0	1	3	2	0	1	2	2	79	2	1	3	0	1	0	1	4	102
		0.0	1.0	2.9	2.0	0.0	1.0	2.0	2.0	77.5	2.0	1.0	2.9	0.0	1.0	0.0	1.0	3.9	66
		0	0	0	2	0	0	1	3	53	2	1	1	0	0	1	0	2	84
		0.0	0.0	0.0	3.0	0.0	0.0	1.5	4.5	80.3	3.0	1.5	1.5	0.0	0.0	1.5	0.0	3.0	84
		1	1	0	1	1	0	2	3	57	9	3	1	2	0	0	0	3	84
		1.2	1.2	0.0	1.2	1.2	0.0	2.4	3.6	67.9	10.7	3.6	1.2	2.4	0.0	0.0	0.0	3.6	

What changes, if any, does your organization anticipate in the hiring of new college graduates for 1981-82? (Continued)

TYPES OF GRADUATES	MEAN SCORE	Increase										Decrease							Cases
		50% or More	25- 49%	11- 24%	9- 10%	7- 8%	5- 6%	3- 4%	1- 2%	Remain 1- the Same	3- 4%	5- 6%	7- 8%	9- 10%	11- 24%	25- 49%	50- 100%		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	CASES
Social Science	9.2	0	0	0	0	1	0	0	0	50	3	2	1	0	0	0	0	1	58
Human Ecology	9.4	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	85.2	5.2	3.4	1.7	0.0	0.0	0.0	0.0	1.7	41
Communication	9.4	1	0	0	0	0	0	0	0	38	0	1	2	0	0	0	1	1	69
Packaging	9.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.4	0.0	2.4	4.9	0.0	0.0	0.0	2.4	2.4	60
Sanitary Engin.	9.5	0	1	0	1	0	0	2	2	54	1	1	2	0	0	2	1	2	49
		0.0	1.4	0.0	1.4	0.0	0.0	2.9	2.9	78.3	1.4	1.4	2.9	0.0	0.0	2.9	1.4	2.9	60
		0	0	0	0	0	1	2	3	47	0	3	1	0	0	0	0	3	49
		0.0	0.0	0.0	0.0	0.0	1.7	3.3	5.0	78.3	0.0	5.0	1.7	0.0	0.0	0.0	0.0	5.0	49
		1	0	1	0	0	0	2	3	33	1	1	1	0	2	2	0	2	49
		2.0	0.0	2.0	0.0	0.0	0.0	4.1	6.1	67.3	2.0	2.0	2.0	0.0	4.1	4.1	0.0	4.1	
GRAND MEAN							8.574												

OBSERVATIONS: Overall the surveyed employers expect to hire approximately 1% more new college graduates this year. The highest demanded category of new college graduates this year is computer sciences, where an increase of approximately 3-4% is anticipated in the number of new colleges graduates hired for 1981-82. An increase of 1-2% is expected for electrical engineers, engineers in all categories, mechanical engineers, marketing/sales graduates, hotel restaurant-institution management graduates, and business graduates of all types. Demand for all the other graduates is expected to remain approximately the same except in sanitary engineering where a decrease of 1-2% is anticipated according to the surveyed employers.

What changes, if any, does your organization anticipate in the hiring of new college graduates for 1981-82? Absolute frequencies are listed for each answer on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest. ORGANIZATION TYPE.

CATEGORY OF EMPLOYER	MEAN SCORE	50% or More	25-49%	11-24%	Increase					Remain the Same	Decrease					25-49%	50-100%	Cases
					9-10%	7-8%	5-6%	3-4%	1-2%		7-8%	9-10%	11-24%	13-14%				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	CASES
Tire & Rubber	4.0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
Military	5.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
Hotels, Motels, Resorts, Camps, Recreational Facilities	6.0	25.0	0.0	0.0	25.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
Merchandising & Related Services (Retailing Excl. Groceries)	7.0	33.3	0.0	16.7	0.0	0.0	0.0	16.7	0.0	16.7	0.0	0.0	0.0	0.0	0.0	16.7	0.0	16
Electronics & Instruments	7.1	0.0	8.3	12.5	12.5	0.0	0.0	0.0	18.8	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
Banking, Finance, & Ins.	7.5	4.5	4.5	9.1	9.1	0.0	0.0	4.5	4.5	54.5	4.5	0.0	0.0	0.0	4.5	0.0	0.0	22
Service Organizations (Boy Scouts, Red Cross)	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
Metals & Metal Products	7.5	16.7	0.0	0.0	8.3	0.0	8.3	0.0	0.0	58.3	0.0	0.0	0.0	0.0	0.0	8.3	0.0	12
Electrical Machinery & Equipment (Computers)	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	16.7	33.3	16.7	0.0	0.0	0.0	0.0	0.0	6
Public Utilities (Including Transportation)	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2	1	8	0	0	1	0	0	0	15
Chemicals, Drugs, & Allied Products	7.9	0.0	0.0	6.7	13.3	0.0	0.0	13.3	6.7	53.3	0.0	0.0	6.7	0.0	0.0	0.0	0.0	16
Governmental Administration	7.5	7.1	0.0	7.1	14.3	7.1	7.1	0.0	0.0	35.7	7.1	0.0	0.0	0.0	0.0	7.1	7.1	14
Food, Beverage Processing, and Restaurants	8.0	0.0	0.0	8.3	0.0	8.3	0.0	8.3	0.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12
Accounting	8.4	0.0	0.0	12.5	0.0	6.3	12.5	0.0	6.3	50.0	0.0	0.0	0.0	0.0	0.0	6.3	6.3	16
Glass, Paper, Packaging & Allied Products	8.4	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	70.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	10
Diversified Conglomerates	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
Volunteer Organizations (Churches, Peace Corps)	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	***	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Agribusiness	9.0	0.0	14.3	0.0	0.0	0.0	14.3	0.0	0.0	42.9	0.0	0.0	0.0	0.0	28.6	0.0	0.0	7
Construction & Bldg. Materials	9.2	0.0	0.0	11.1	11.1	0.0	11.1	0.0	0.0	44.4	0.0	0.0	0.0	0.0	0.0	0.0	22.2	9
Printing, Publishing & Informational Services	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	50.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	4
Educational Institutions	9.4	0.0	0.0	0.0	0.0	4.2	0.0	0.0	8.3	62.5	8.3	4.2	4.2	8.3	0.0	0.0	0.0	24
Automotive & Mechanical Equipment	9.4	12.5	0.0	0.0	0.0	0.0	0.0	0.0	25.0	37.5	0.0	0.0	0.0	0.0	0.0	12.5	12.5	8
Hospitals & Health Services	9.5	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	16.7	6
Research and/or Consulting Services	9.5	0.0	0.0	9.1	0.0	0.0	0.0	9.1	0.0	83.6	0.0	0.0	0.0	0.0	0.0	9.1	0.0	11
Petroleum & Allied Products	9.7	0.0	9.1	9.1	0.0	0.0	0.0	9.1	0.0	27.3	0.0	0.0	18.2	0.0	9.1	18.2	0.0	11
Aerospace & Components	10.3	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	11.1	11.1	9

GRAND MEAN

8.280

What changes, if any, does your organization anticipate in the hiring of new college graduates for 1981-82? Absolute frequencies are listed for each answer on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest. ORGANIZATION TYPE.

OBSERVATIONS: When estimating the anticipated change in new college graduates being hired by their organizations for 1981-82, tire and rubber companies anticipated the greatest increase (up 9-10%). The military anticipated an increase of 7-8%, and hotels motels and recreational facilities anticipated an increase of 5-6%.

Merchandising and retail industries as well as electronics and instruments expected increases of 3-4%.

Those organizations with decreases included aerospace and components, petroleum and allied products, and research and consulting services (down 1-2%). The remaining categories of employers expected their hiring to remain the same or increase somewhat (up 1-2%).

In summarizing the outlook for new college graduates with your organization this year (1981-82), please indicate your rating for each category by placing an X in the appropriate box. (XHI=Extremely high demand, HI=High demand, MED=Medium demand, LOW=Low demand, NO=No demand). Absolute frequencies are listed for each answer on the first line and percentages are listed on the second line.

CATEGORY OF EMPLOYMENT	MEAN SCORE	Extremely High Demand (1)	High Demand (2)	Medium Demand (3)	Low Demand (4)	No Demand (5)	VALID CASES
Overseas	4.706	2 (.7)	8 (2.9)	12 (4.3)	26 (9.3)	231 (82.8)	279
GRAND MEAN	4.706						

OBSERVATIONS: The demand for graduates seeking positions in overseas locations is very low. Overall this option received a rating of no demand. Only 48 of the surveyed employers suggested any job availability at all for their overseas locations.

In summarizing the outlook for new college graduates with your organization this year (1981-82), please indicate your rating for each category by placing an X in the appropriate box. (XHI=Extremely high demand, HI=High demand, MED=Medium demand, LOW=Low demand, NO=No demand). Absolute frequencies are listed for each answer on the first line and percentages are listed on the second line. Answers for MASTERS, DOCTORAL, MINORITY, WOMEN and ALL GRADUATES are listed in mean score order from lowest to highest.

CATEGORIES OF GRADUATES	MEAN SCORE	Extremely High Demand (1)	High Demand (2)	Medium Demand (3)	Low Demand (4)	No Demand (5)	VALID CASES
Minorities	2.577	85 (24.3)	105 (30.0)	85 (24.3)	23 (6.6)	52 (14.9)	350
Women	2.629	59 (16.7)	114 (32.3)	119 (33.7)	21 (5.9)	40 (11.3)	353
All Bachelor's Graduates	2.776	46 (18.0)	59 (23.1)	88 (33.7)	34 (13.3)	30 (11.8)	255
Master's	3.776	22 (7.0)	31 (9.9)	71 (22.7)	60 (19.2)	129 (41.2)	313
Doctoral	4.148	17 (5.7)	23 (7.7)	40 (13.5)	36 (12.1)	181 (60.9)	297
GRAND MEAN	3.158						

OBSERVATIONS: According to the surveyed employers, the outlook for women and minority college graduates this year is expected to be medium demand. Demand for all bachelor's degree graduates is also expected to be medium. Receiving a rating of low demand are master's and especially doctoral degree graduates.

In summarizing the outlook for new college graduates with your organization this year (1981-82), please indicate your rating for each category by placing an X in the appropriate box. (XHI=Extremely high demand, HI=High demand, MED=Medium demand, LOW=Low demand, NO=No demand). Absolute frequencies are listed for each answer on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest. ALL GRADUATES.

	MEAN SCORE	XHI (1)	HI (2)	MED (3)	LOW (4)	NO (5)	CASES
Volunteer Organizations (Churches, Peace Corps)	1.0	1	0	0	0	0	1
		****	0.0	0.0	0.0	0.0	
Tire & Rubber	1.0	1	0	0	0	0	1
		****	0.0	0.0	0.0	0.0	
Hotels, Motels, Resorts, Camps, Recreational Facilities	1.8	2	3	1	0	0	6
		33.3	50.0	16.7	0.0	0.0	
Military	2.0	1	1	1	0	0	3
		33.3	33.3	33.3	0.0	0.0	
Merchandising & Related Services (Retailing Industries)	2.1	8	5	6	0	1	20
		40.0	25.0	30.0	0.0	5.0	
Glass, Paper, Packaging & Allied Products	2.2	2	6	2	1	0	11
		18.2	54.5	18.2	9.1	0.0	
Accounting	2.2	5	3	3	1	1	13
		38.5	23.1	23.1	7.7	7.7	
Petroleum & Allied Products	2.3	1	4	4	0	0	9
		11.1	44.4	44.4	0.0	0.0	
Electronics & Instruments	2.4	1	3	4	0	0	8
		12.5	37.5	50.0	0.0	0.0	
Public Utilities (Including Transportation)	2.4	3	2	4	0	1	10
		30.0	20.0	40.0	0.0	10.0	
Chemicals, Drugs, & Allied Products	2.5	2	4	7	1	0	14
		14.3	28.6	50.0	7.1	0.0	
Governmental Administration	2.6	4	2	3	1	2	12
		33.3	16.7	25.0	8.3	16.7	
Construction & Bldg. Materials Manufacturing	2.8	1	2	5	0	1	9
		11.1	22.2	55.6	0.0	11.1	
Metals & Metal Products	2.8	1	6	6	1	2	16
		6.3	37.5	37.5	6.3	12.5	
Aerospace & Components	2.9	0	1	1	2	1	7
		28.6	14.3	14.3	28.6	14.3	
Agribusiness	2.9	1	2	3	3	0	9
		11.1	22.2	33.3	33.3	0.0	
Printing, Publishing & Informational Services	3.0	1	0	2	0	1	4
		25.0	0.0	50.0	0.0	25.0	
Electrical Machinery & Equipment (Computers)	3.0	1	0	3	0	1	5
		20.0	0.0	60.0	0.0	20.0	
Banking, Finance, & Ins.	3.0	2	4	7	6	1	20
		10.0	20.0	35.0	30.0	5.0	
Diversified Conglomerate	3.1	0	2	3	1	1	7
		0.0	28.6	42.9	14.3	14.3	
Hospitals & Health Services	3.3	0	1	2	0	1	4
		0.0	25.0	50.0	0.0	25.0	
Automotive & Mechanical Equipment	3.4	0	1	4	2	1	8
		0.0	12.5	50.0	25.0	12.5	
Food, Beverage Processing, and Restaurants	3.4	1	1	7	3	3	15
		6.7	6.7	46.7	20.0	20.0	
Research and/or Consulting Services	3.5	1	1	3	4	2	11
		9.1	9.1	27.3	36.4	18.2	
Educational Institutions	3.5	4	4	2	3	10	26
		15.4	15.4	7.7	23.1	38.5	
Service Organizations (Boy Scouts, Red Cross)	4.0	0	0	0	100.0	0	1
		0.0	0.0	0.0	****	0.0	
Communication (Radio, TV & Newspapers)	4.0	0	0	0	100.0	0	1
		0.0	0.0	0.0	****	0.0	

GRAND MEAN

2.777

OBSERVATIONS: When rating the outlook for bachelor's degree graduates in their organizations this year, volunteer organizations and tire and rubber organizations indicated the highest demand (extremely high demand). Those organizations with high demand included hotels motels and recreational facilities, the military, merchandising and retail industries, glass paper packaging and allied products, accounting firms, petroleum and allied products, electronics and instruments, and public utilities. Those organizations with the fewest numbers of employment opportunities (low demand) included communications organizations; service organizations; educational institutions; and research and consulting organizations. The remaining categories of employers expected medium demand for bachelor's degree graduates.

In summarizing the outlook for new college graduates with your organization this year (1981-82), please indicate your rating for each category by placing an X in the appropriate box. (XHI=Extremely high demand, HI=High demand, MED=Medium demand, LOW=Low demand, NO=No demand). Absolute frequencies are listed for each answer on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest. WOMEN.

ORGANIZATION TYPE	MEAN SCORE	XHI (1)	HI (2)	MED (3)	LOW (4)	NO (5)	CASES
Volunteer Organizations (Churches, Peace Corps)	1.5	1	1	0	0	0	2
		50.0	50.0	0.0	0.0	0.0	
Tire & Rubber	1.5	1	1	0	0	0	2
		50.0	50.0	0.0	0.0	0.0	
Service Organizations (Boy Scouts, Red Cross)	2.0	1	0	1	0	0	2
		50.0	0.0	50.0	0.0	0.0	
Chemicals, Drugs, & Allied Products	2.1	5	9	6	0	0	20
		25.0	45.0	30.0	0.0	0.0	
Petroleum & Allied Products	2.1	4	5	3	1	0	13
		30.8	38.5	23.1	7.7	0.0	
Hotels, Motels, Resorts, Camps Recreational Facilities	2.1	3	2	2	1	0	8
		37.5	25.0	25.0	12.5	0.0	
Electronics & Instruments	2.2	3	10	6	0	0	19
		15.8	52.6	31.6	0.0	0.0	
Public Utilities (Including Transportation)	2.2	6	5	7	0	1	19
		31.6	26.3	36.8	0.0	5.3	
Military	2.3	0	3	1	0	0	4
		0.0	75.0	25.0	0.0	0.0	
Governmental Administration	2.4	5	5	5	0	2	17
		29.4	29.4	29.4	0.0	11.8	
Merchandising & Related Services (Retailing Industries)	2.4	7	6	10	0	2	26
		26.0	24.0	40.0	0.0	8.0	
Glass, Paper, Packaging & Allied Products	2.4	0	7	4	0	0	11
		0.0	63.6	36.4	0.0	0.0	
Construction & Bldg. Materials Manufacturing	2.4	2	7	5	0	1	15
		13.3	46.7	33.3	0.0	6.7	
Aerospace & Components	2.4	1	4	5	0	0	10
		10.0	40.0	50.0	0.0	0.0	
Diversified Conglomerate	2.5	1	3	3	1	0	8
		12.5	37.5	37.5	12.5	0.0	
Banking, Finance, & Insurance	2.6	5	9	13	4	1	32
		15.6	28.1	40.6	12.5	3.1	
Printing, Publishing & Informational Services	2.6	2	0	2	0	1	5
		40.0	0.0	40.0	0.0	20.0	
Electrical Machinery & Equipment (Computers)	2.6	1	5	8	0	1	13
		7.7	38.5	46.2	0.0	7.7	
Agribusiness	2.8	2	2	2	2	1	9
		22.2	22.2	22.2	22.2	11.1	
Food, Beverage Processing, and Restaurants	2.8	1	6	8	1	2	18
		5.6	33.3	44.4	5.6	11.1	
Research and/or Consulting Services	3.0	3	2	5	2	3	15
		20.0	13.3	33.3	13.3	20.0	
Metals & Metal Products	3.0	0	8	3	2	3	16
		0.0	50.0	18.8	12.5	18.8	
Accounting	3.4	2	4	6	1	7	20
		10.0	20.0	30.0	5.0	35.0	
Hospitals & Health Services	3.4	0	2	1	0	2	5
		0.0	40.0	20.0	0.0	40.0	
Automotive & Mechanical Equipment	3.5	0	1	6	0	3	10
		0.0	10.0	60.0	0.0	30.0	
Educational Institutions	3.6	2	4	6	8	10	28
		7.1	14.3	21.4	21.4	35.7	

GRAND MEAN

2.636

OBSERVATIONS: When summarizing the outlook for women graduates in their organizations this year, volunteer organizations, and tire and rubber companies expected the best outlook (high demand). Those organizations rating the outlook lowest were educational institutions, and automotive and mechanical equipment organizations (low demand). All the other organizations rated the outlook as good (medium demand).

In summarizing the outlook for new college graduates with your organization this year (1981-82), please indicate your rating for each category by placing an X in the appropriate box. (XHI=Extremely high demand, HI=High demand, MED=Medium demand, LOW=Low demand, NO=No demand). Absolute frequencies are listed for each answer on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest. MINORITIES.

ORGANIZATION TYPE	MEAN SCORE	XHI (1)	HI (2)	MED (3)	LOW (4)	NO (5)	CASES
Tire & Rubber	1.0	2	0	0	0	0	2
		****	0.0	0.0	0.0	0.0	
Volunteer Organizations (Churches, Peace Corps)	1.5	1	1	0	0	0	2
		50.0	50.0	0.0	0.0	0.0	
Chemicals, Drugs & Allied Products	1.8	11	2	4	0	1	18
		61.1	11.1	22.2	0.0	5.6	
Service Organizations (Boy Scouts, Red Cross)	2.0	1	0	1	0	0	2
		50.0	0.0	50.0	0.0	0.0	
Military	2.0	1	2	1	0	0	4
		25.0	50.0	25.0	0.0	0.0	
Electronics & Instruments	2.1	5	8	6	0	0	19
		26.3	42.1	31.6	0.0	0.0	
Banking, Finance, & Ins.	2.2	9	13	7	2	1	32
		28.1	40.6	21.9	6.3	3.1	
Diversified Conglomerate	2.3	2	3	2	1	0	8
		25.0	37.5	25.0	12.5	0.0	
Petroleum & Allied Products	2.3	3	4	4	1	0	12
		25.0	33.3	33.3	8.3	0.0	
Public Utilities (Including Transportation)	2.3	5	8	4	0	2	19
		26.3	42.1	21.1	0.0	10.5	
Merchandising & Related Services (Retailing Industries)	2.3	9	7	5	1	3	25
		36.0	28.0	20.0	4.0	12.0	
Electrical Machinery & Equipment (Computers)	2.3	2	7	3	0	1	13
		15.4	53.8	23.1	0.0	7.7	
Aerospace & Components	2.4	1	4	5	0	0	10
		10.0	40.0	50.0	0.0	0.0	
Governmental Administration	2.4	5	6	3	0	3	17
		29.4	35.3	17.6	0.0	17.6	
Construction & Bldg. Materials Manufacturing	2.5	3	5	5	1	1	15
		20.0	33.3	33.3	6.7	6.7	
Printing, Publishing & Informational Services	2.6	2	0	2	0	1	5
		40.0	0.0	40.0	0.0	20.0	
Hotels, Motels, Resorts, Camps, Recreational Facilities	2.8	2	1	3	1	1	8
		25.0	12.5	37.5	12.5	12.5	
Food, Beverage Processing, and Restaurants	2.9	1	6	7	2	2	18
		5.6	33.3	38.9	11.1	11.1	
Agribusiness	2.9	3	1	1	2	2	9
		33.3	11.1	11.1	22.2	22.2	
Educational Institutions	3.0	6	10	1	5	8	30
		20.0	33.3	3.3	16.7	26.7	
Glass, Paper, Packaging & Allied Products	3.0	1	4	3	0	3	11
		9.1	36.4	27.3	0.0	27.3	
Metals & Metal Products	3.1	1	4	4	2	3	14
		7.1	28.6	28.6	14.3	21.4	
Research and/or Consulting Services	3.2	3	2	3	3	4	15
		20.0	13.3	20.0	20.0	26.7	
Accounting	3.5	3	3	3	2	8	19
		15.8	15.8	15.8	10.5	42.1	
Automotive & Mechanical Equipment	3.5	0	2	5	0	4	11
		0.0	18.2	45.5	0.0	36.4	
Hospitals & Health Services	4.0	0	1	1	0	3	5
		0.0	20.0	20.0	0.0	60.0	
GRAND MEAN					2.583		

OBSERVATIONS: When rating the outlook for minority college graduates in their organizations this year, tire and rubber companies expected the best outlook (extremely high demand). Those organizations with high demand included volunteer organizations, chemicals, drugs, and allied products, service organizations, military, electronics and instruments, banking, finance and insurance, diversified conglomerates, petroleum and allied products, public utilities, merchandising and retail industries, electrical machinery and equipment, aerospace and components, and governmental administration.

Those organizations with the lowest demand (low demand) were hospital and health services, automotive and mechanical equipment, and accounting firms.

In summarizing the outlook for new college graduates with your organization this year (1981-82), please indicate your rating for each category by placing an X in the appropriate box. (XHI=Extremely high demand, HI=High demand, MED=Medium demand, LOW=Low demand, NO=No demand). Absolute frequencies are listed for each answer on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest. MBAs.

ORGANIZATION TYPE	MEAN SCORE	XHI (1)	HI (2)	MED (3)	LOW (4)	NO (5)	CASES
Service Organizations (Boy Scouts, Red Cross)	2.0	0	2	0	0	0	2
Military		0.0	****	0.0	0.0	0.0	
	2.3	1	1	2	0	0	4
Electrical Machinery & Equipment (Computers)	2.8	25.0	25.0	50.0	0.0	0.0	
		4	1	1	3	2	11
Volunteer Organizations (Churches, Peace Corps)	3.0	36.4	9.1	9.1	27.3	18.2	
		0	1	0	1	0	2
Hospitals & Health Services		0.0	50.0	0.0	50.0	0.0	
	3.0	2	0	1	0	2	5
Diversified Conglomerate		40.0	0.0	20.0	0.0	40.0	
	3.1	0	2	4	1	1	8
Banking, Finance, & Ins.		0.0	25.0	50.0	12.5	12.5	
	3.3	5	5	6	5	9	30
Chemicals, Drugs, & Allied Products		16.7	16.7	20.0	16.7	30.0	
	3.3	2	2	5	5	3	17
Glass, Paper, Packaging & Allied Products		11.8	11.8	29.4	29.4	17.6	
	3.5	0	3	3	2	3	11
Petroleum & Allied Products		0.0	27.3	27.3	18.2	27.3	
	3.6	1	3	1	3	5	13
Public Utilities (Including Transportation)		7.7	23.1	7.7	23.1	38.5	
	3.6	0	1	8	4	4	17
Aerospace & Components		0.0	5.9	47.1	23.5	23.5	
	3.7	0	0	5	3	2	10
Accounting		0.0	0.0	50.0	30.0	20.0	
	3.9	2	1	3	0	9	15
Research and/or Consulting Services		13.3	6.7	20.0	0.0	60.0	
	3.9	1	1	4	3	7	16
Metals & Metal Products		6.3	6.3	25.0	18.8	43.8	
	3.9	0	1	6	3	6	16
Tire & Rubber		0.0	6.3	37.5	18.8	37.5	
	4.0	0	0	1	0	1	2
Printing, Publishing & Informational Services		0.0	0.0	50.0	0.0	50.0	
	4.0	0	0	2	0	2	4
Merchandising & Related Services (Retailing Industry)		0.0	0.0	50.0	0.0	50.0	
	4.0	1	3	2	7	11	24
Construction & Bldg. Materials Manufacturing		4.2	12.5	8.3	29.2	45.8	
	4.0	1	1	3	0	8	13
Agribusiness		7.7	7.7	23.1	0.0	61.5	
	4.0	1	0	2	1	5	9
Electronics & Instruments		11.1	0.0	22.2	11.1	55.6	
	4.1	0	1	2	7	5	15
Automotive & Mechanical Equipment		0.0	6.7	13.3	46.7	33.3	
	4.1	0	1	2	3	5	11
Governmental Administration		0.0	9.1	18.2	27.3	45.5	
	4.2	1	1	1	1	9	13
Educational Institutions		7.7	7.7	7.7	7.7	69.2	
	4.5	0	0	3	3	12	18
Food, Beverage Processing, and Restaurants		0.0	0.0	16.7	16.7	66.7	
	4.6	0	0	2	1	11	14
Hotels, Motels, Resorts, Camps, Recreational Facilities		0.0	0.0	14.3	7.1	78.6	
	4.7	0	0	1	0	6	7
		0.0	0.0	14.3	0.0	85.7	
GRAND MEAN					3.772		

OBSERVATIONS: When summarizing the outlook for MBAs in their organizations this year, the highest ratings were received from service organizations and the military (high demand). Those organizations with medium demand included electrical machinery and equipment companies, volunteer organizations, hospitals and health services, diversified conglomerates, banking, finance, and insurance companies, and chemicals, drugs, and allied products. Those organizations with the least demand for master's graduates included hotels, motels, and recreational facilities, food beverage processing and restaurants, and educational institutions.

In summarizing the outlook for new college graduates with your organization this year (1981-82), please indicate your rating for each category by placing an X in the appropriate box. (XHI=Extremely high demand, HI=High demand, MED=Medium demand, LOW=Low demand, NO=No demand). Absolute frequencies are listed for each answer on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest. DOCTORAL.

ORGANIZATION TYPE	MEAN SCORE	XHI (1)	HI (2)	MED (3)	LOW (4)	NO (5)	CASES
Volunteer Organizations (Churches, Peace Corps)	2.0	0	1	0	0	0	1
Service Organizations (Boy Scouts, Red Cross)	2.0	0	1	0	0	0	1
Chemicals, Drugs, & Allied Products	2.4	6	4	3	2	2	17
Tire & Rubber	2.5	1	0	0	1	0	2
Military	2.8	0	1	3	0	0	4
Petroleum & Allied Products	3.0	3	4	1	0	5	13
Electrical Machinery & Equipment (Computers)	3.1	4	0	0	1	4	9
Diversified Conglomerate	3.4	0	2	2	1	2	7
Hospitals & Health Services	3.6	1	0	1	1	2	5
Research and/or Consulting Services	3.7	1	1	5	2	6	15
Aerospace & Components	3.8	0	0	4	4	2	10
Metals & Metal Products	3.9	1	2	3	0	9	15
Electronics & Instruments	4.1	0	2	1	6	6	15
Glass, Paper, Packaging & Allied Products	4.2	0	2	1	1	7	11
Governmental Administration	4.2	0	1	2	3	7	13
Construction & Bldg. Materials	4.5	0	1	1	2	9	13
Manufacturing	4.6	0	0	2	0	7	9
Agribusiness	4.6	0	0	22.2	0.0	77.8	16
Public Utilities (Including Transportation)	4.6	0	0	6.3	25.0	68.8	11
Automotive & Mechanical Equipment	4.6	0	0	9.1	18.2	72.7	14
Food, Beverage Processing, and Restaurants	4.6	0	7.1	7.1	0.0	85.7	28
Banking, Finance, & Ins.	4.6	0	0	5	0	23	18
Educational Institutions	4.7	0	0	2	2	14	21
Merchandising & Related Services (Retailing Industries)	4.9	0	0	1	1	19	3
Printing, Publishing & Informational Services	5.0	0	0	0	0	3	7
Hotels, Motels, Resorts, Camps, Recreational Facilities	5.0	0	0	0	0	7	13
Accounting	5.0	0	0	0	0	13	

GRAND MEAN

4.141

OBSERVATIONS: When summarizing the outlook for doctoral degree graduates this year in their organizations, the greatest potential (high demand) was expected in volunteer organizations, service organizations, and chemicals, drugs, and allied products organizations. A few organizations listed medium demand for doctoral degree graduates. These organizations included tire and rubber companies, the military, petroleum and allied products, electrical machinery and equipment companies, and diversified conglomerates. Other organizations listed low demand. These included hospitals and health services, research and consulting services, aerospace and components companies, metals and metal products companies, electronics and instruments companies, glass, paper, packaging, and allied products companies, and government administration. The remaining organizations indicated no demand for doctoral degree graduates.

7. In summarizing the outlook for new college graduates with your organization this year (1981-82), please indicate your rating for each category by placing an X in the appropriate box. (XHI=Extremely high demand, HI=High demand, MED=Medium demand, LOW=Low demand, NO=No demand). Absolute frequencies are listed for each answer on the first line and percentages are listed on the second line. Answers for INDIVIDUAL MAJORS are listed in mean score order from lowest to highest.

ACADEMIC MAJORS	MEAN SCORE	Extremely High Demand (1)	High Demand (2)	Medium Demand (3)	Low Demand (4)	No Demand (5)	VALID CASES
Computer Science	3.242	62 (19.7)	62 (19.7)	46 (14.6)	26 (8.3)	118 (37.6)	314
Accounting	3.300	22 (6.9)	68 (21.5)	96 (30.3)	55 (17.4)	78 (24.0)	317
Mechanical Engineering	3.342	58 (18.7)	68 (21.3)	32 (10.3)	20 (6.5)	134 (43.2)	310
Electrical Engineering	3.376	68 (21.9)	49 (15.8)	33 (10.6)	20 (6.4)	141 (45.3)	311
Business	3.421	24 (10.9)	37 (16.7)	60 (27.1)	22 (10.0)	78 (35.3)	221
Engineering	3.706	39 (20.9)	17 (9.1)	14 (7.5)	7 (3.7)	110 (58.8)	187
General Business	3.748	13 (4.2)	39 (12.7)	83 (27.1)	48 (15.7)	123 (40.2)	308
Financial Administration	3.752	11 (3.6)	43 (14.1)	75 (24.5)	59 (19.3)	118 (38.6)	306
Marketing	3.791	19 (6.4)	37 (12.5)	68 (22.9)	36 (12.1)	137 (46.1)	297
Chemical Engineering	3.954	27 (9.5)	38 (13.4)	27 (9.5)	21 (7.4)	171 (60.2)	284
Civil Engineering	4.080	21 (7.3)	25 (8.7)	38 (13.2)	29 (10.1)	174 (60.6)	287
Personnel	4.136	7 (2.4)	18 (6.1)	55 (18.7)	62 (21.1)	152 (51.7)	294
Chemistry	4.153	14 (4.9)	21 (7.3)	48 (16.7)	29 (10.1)	176 (61.1)	288
Mathematics	4.188	10 (3.5)	13 (4.5)	64 (22.3)	28 (9.1)	174 (60.6)	287
Physics	4.361	8 (2.1)	15 (5.4)	41 (14.6)	28 (10.0)	190 (67.9)	280
Metallurgy/Material Sci.	4.375	10 (3.6)	17 (6.1)	28 (10.0)	28 (10.0)	197 (70.4)	280
Natural Sciences	4.435	5 (2.1)	11 (4.6)	31 (13.0)	20 (8.4)	172 (72.0)	239
Liberal Arts	4.468	2 (.7)	11 (3.9)	34 (12.0)	42 (14.8)	195 (68.7)	284
Engineering	4.476	1 (4.3)	2 (8.7)	1 (4.3)	0 (0.0)	19 (82.8)	23
Education	4.500	10 (3.4)	10 (3.4)	20 (6.8)	36 (12.3)	216 (74.0)	292
Hotel, Restaurant, Institutional Mgt.	4.560	15 (5.3)	9 (3.2)	9 (3.2)	20 (7.0)	231 (81.3)	284
Agriculture & Nat. Resources	4.572	8 (3.0)	8 (3.0)	20 (7.4)	19 (7.1)	214 (79.6)	269
Communication	4.575	0 (0.0)	8 (2.0)	32 (12.7)	28 (11.1)	187 (74.2)	252

ACADEMIC MAJORS	MEAN SCORE	Extremely High Demand (1)	High Demand (2)	Medium Demand (3)	Low Demand (4)	No Demand (5)	VALID CASES
Retailing	4.619	11 (4.0)	7 (2.6)	13 (4.8)	13 (4.8)	229 (83.9)	273
Advertising	4.657	1 (.4)	2 (.7)	24 (8.8)	36 (13.1)	211 (77.0)	274
Social Sciences	4.659	2 (.7)	5 (1.8)	19 (6.9)	33 (12.0)	217 (78.6)	276
Petroleum	4.664	8 (2.9)	5 (1.8)	15 (5.4)	17 (6.1)	235 (83.9)	280
Packaging	4.697	1 (.4)	5 (1.8)	23 (8.5)	17 (6.3)	225 (83.0)	271
Human Ecology	4.761	4 (1.5)	3 (1.2)	12 (4.6)	13 (5.0)	227 (87.6)	259
GRAND MEAN	4.134						

OBSERVATIONS: In summarizing the outlook for new college graduates, the surveyed employers rated computer science, accounting, mechanical engineering, electrical engineering, and business majors at medium demand. Majors receiving lower demand ratings were engineering, general business administration, financial administration, chemistry, mathematics, physics, metallurgy/material science, natural sciences, and liberal arts graduates. Several academic majors received ratings of no demand. These included education, hotel restaurant and institutional management, agriculture and natural resources, communication arts, retailing, advertising, social sciences, petroleum engineering, packaging, and human ecology.

Please indicate the average starting salaries PER YEAR paid for these academic majors hired by your organization last year (1980-81) and for those you expect to hire this year (1981-82). Include cost of living adjustments in salary figures. ALL EMPLOYERS.

ACADEMIC MAJOR	LAST YEAR AVERAGE	NO.	THIS YEAR AVERAGE	NO.	Percentage Increase
Agriculture & Nat. Res.	16597.73	44	16890.24	41	1.8
Accounting	16463.78	185	17280.37	163	4.7
Financial Admin.	16492.31	78	17320.29	69	5.0
General Business	15527.52	109	16391.58	95	5.6
Hotel, Restaurant Institutional Mgt.	14604.76	42	15194.74	38	4.0
Marketing/Sales	15627.38	84	16662.50	72	6.6
Personnel	16006.00	50	17036.00	50	6.4
Communications	14612.50	24	15513.64	22	6.2
Education	14071.19	59	15114.29	56	7.4
Chemical Engineering	21617.58	91	22900.00	73	5.9
Civil Engineering	19760.26	78	20914.93	67	5.8
Computer Science	18602.48	121	19763.27	98	6.2
Electrical Engineering	21145.67	127	22450.49	103	6.2
Mechanical Engineering	21140.58	138	22315.04	113	5.6
Metallurgy/Material Sci.	19858.14	43	21136.84	38	6.4
Petroleum	20043.48	23	19735.29	17	-1.5
Human Ecology	14054.84	31	14579.31	29	3.7
Liberal Arts	14785.45	55	15634.78	46	5.7
Chemistry	17675.41	61	17950.00	46	1.6
Mathematics	17409.43	53	18016.67	42	3.5
Physics	17696.97	33	18192.59	27	2.8
Social Science	13747.37	19	14112.50	16	2.7
Master's	22064.96	117	23202.97	101	5.2
Doctorates	26661.70	47	27375.00	36	2.7

OBSERVATION: According to the surveyed employers, the highest starting salaries last year (1980-81) were paid to chemical engineers (\$21,618), electrical engineers (\$21,146) and mechanical engineers (\$21,141). The most employers reported salary offers last year for accounting graduates, mechanical engineers, electrical engineers, computer science majors, and general business administration majors. The lowest starting salary offers were paid to social science majors (\$13,747), human ecology majors (\$14,369), hotel restaurant and institutional management majors (\$14,605), education majors (\$14,071), communications majors (\$14,612), and liberal arts graduates (\$14,785). This year (1981-82), the highest starting salaries will still be paid to chemical engineers (\$22,900), electrical engineers (\$22,450), and mechanical engineers (\$22,315). Next will come metallurgical engineers (\$21,137), civil engineering (\$20,915), petroleum engineers (\$19,735), and computer science majors (\$19,763).

Master's degree graduates will be paid approximately \$23,203 per year, and doctoral degree graduates will be paid approximately \$27,375 per year.

Please indicate the average starting salaries PER YEAR paid for these academic majors paid by your organization last year (1980-81) and for those you expect to hire this year (1981-82). Include cost of living adjustments in salary figures. BUSINESS/INDUSTRY.

ACADEMIC MAJOR	LAST YEAR AVERAGE	NO.	THIS YEAR AVERAGE	NO.
BUSINESS/INDUSTRY ONLY				
Agriculture & Nat. Res.	16778.95	39	17054.05	37
Accounting	16589.02	173	17382.78	151
Financial Admin.	16714.29	70	17559.02	01
General Business	15658.00	100	16530.23	86
Hotel, Restaurant Institutional Mgt.	14656.41	39	15234.29	35
Marketing/Sales	15664.63	82	16710.00	70
Personnel	16275.00	44	17275.00	44
Communications	14915.79	19	15717.65	17
Education	14431.25	16	15113.33	15
Chemical Engineering	22004.76	84	23359.09	66
Civil Engineering	19943.66	71	21113.11	61
Computer Science	18851.35	111	20103.41	88
Electrical Engineering	21350.85	118	22715.96	94
Mechanical Engineering	21375.97	129	22571.15	104
Metallurgy/Material Sci.	20046.15	39	21344.12	34
Petroleum	20263.64	22	19968.75	16
Human Ecology	14136.00	25	14473.911	23
Liberal Arts	14912.24	49	15742.50	40
Chemistry	18020.00	55	18320.00	40
Mathematics	17718.75	48	18318.92	37
Physics	17960.71	28	18427.27	22
Social Science	14046.67	15	14233.33	12
Master's	22871.57	102	24087.36	87
Doctorates	27712.20	41	28730.00	30

OBSERVATION 5: Employers in business and industry are paying salaries approximately 1-2% higher than averages for all new college graduates.

Please indicate the average starting salaries PER YEAR paid for these academic majors hired by your organization last year (1980-81) and for those you expect to hire this year (1981-82). Include cost of living adjustments in salary figures. GOVERNMENT.

ACADEMIC MAJOR	LAST YEAR AVERAGE	NO.	THIS YEAR AVERAGE	NO.
GOVERNMENT ONLY				
Agriculture & Nat. Res.	14540.00	5	15375.00	4
Accounting	14672.73	11	16036.36	11
Financial Admin.	14550.00	8	15500.00	8
General Business	14077.78	9	15066.67	9
Hotel, Restaurant Institutional Mgt.	14100.00	2	15000.00	2
Marketing/Sales	14100.00	2	15000.00	2
Personnel	14033.33	6	15283.33	6
Communications	13460.00	5	14820.00	5
Education	13250.00	4	14225.00	4
Chemical Engineering	16971.43	7	18571.43	7
Civil Engineering	17900.00	7	18900.00	6
Computer Science	16144.44	9	17044.44	9
Electrical Engineering	18455.56	9	19677.78	9
Mechanical Engineering	17766.67	9	19355.56	9
Metallurgy/Material Sci.	18025.00	4	19375.00	4
Petroleum	15200.00	1	16000.00	1
Human Ecology	14139.99	5	15540.00	5
Liberal Arts	13750.00	6	14916.67	6
Chemistry	15250.00	4	16450.00	4
Mathematics	15200.00	3	17033.33	3
Physics	16650.00	4	17775.00	4
Social Science	12800.00	3	13966.67	3
Master's	20825.00	4	21700.00	4
Doctorates	22900.00	5	23733.33	3

OBSERVATIONS: Government employers are paying starting salaries averaging approximately 2 to 3% lower than those paid by employers in the private sector.

What average increase occurred last year (1980-81) in salaries paid all CURRENT SALARIED employees working for your organization?

PERCENTAGE OF CHANGE	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
50+	1	2	.5	.5	.5
25-49	2	1	.2	.3	.8
11-24	3	62	14.5	15.8	16.6
9-10	4	184	43.0	46.9	63.5
7-8	5	98	22.9	25.0	88.5
5-6	6	27	6.3	6.9	95.4
3-4	7	9	2.1	2.3	97.7
1-2	8	2	.5	.5	98.2
SAME	9	7	1.6	1.8	100.0
	0	36	8.4	MISSING	
	TOTAL	428	100.0	100.0	
MEAN	4.388				
VALID CASES	392		MISSING CASES	36	

OBSERVATIONS: When reporting the average increase occurring last year (1980-81) in salaries paid current salaried employees working for their organizations, employers indicated an average increase of approximately 9-10% was given.

What average increase occurred last year (1980-81) in salaries paid all CURRENT SALARIED employees working for your organization? Absolute frequencies for each answer are listed on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest.

CATEGORY OF EMPLOYERS	MEAN SCORE	Increase									Remain the Same	CASES
		50% or 25- More 49%	11- 24%	9- 10%	7- 8%	5- 6%	3- 4%	1- 2%				
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
Accounting	3.5	0	0	15	4	3	0	0	0	0	22	
Electrical Machinery & Equipment (Computers)	3.8	0.0	0.0	68.2	18.2	13.6	0.0	0.0	0.0	0.0	14	
Research and/or Consulting Services	3.9	0.0	0.0	28.6	64.3	7.1	0.0	0.0	0.0	0.0	16	
Electronics & Instruments	3.9	0.0	0.0	37.5	50.0	6.3	0.0	6.3	0.0	0.0	21	
Chemicals, Drugs, & Allied Products	3.9	4.8	0.0	23.8	61.9	4.8	0.0	0.0	0.0	4.8	16	
Hospital & Health Services	4.1	6.3	0.0	12.5	56.3	25.0	0.0	0.0	0.0	0.0	7	
Metals & Metal Products	4.2	0.0	0.0	0.0	85.7	14.3	0.0	0.0	0.0	0.0	21	
Hotels, Motels, Resorts, Camps, Recreational Facilities	4.2	0.0	0.0	9.5	71.4	9.5	9.5	0.0	0.0	0.0	10	
Food, Beverage Processing, and Restaurants	4.2	0.0	0.0	20.0	40.0	40.0	0.0	0.0	0.0	0.0	20	
Petroleum & Allied Products	4.2	0.0	0.0	30.0	45.0	15.0	5.0	0.0	0.0	5.0	14	
Diversified Conglomerate	4.2	0.0	0.0	14.3	50.0	35.7	0.0	0.0	0.0	0.0	9	
Military	4.3	0.0	0.0	11.1	55.6	33.3	0.0	0.0	0.0	0.0	4	
Glass, Paper, Packaging & Allied Products	4.3	0.0	0.0	50.0	25.0	0.0	0.0	25.0	0.0	0.0	12	
Public Utilities (Including Transportation)	4.3	0.0	0.0	8.3	58.3	33.3	0.0	0.0	0.0	0.0	22	
Aerospace & Components	4.4	0.0	0.0	18.2	54.5	13.6	9.1	4.5	0.0	0.0	10	
Construction & Building Materials Mfg.	4.4	0.0	0.0	20.0	40.0	20.0	20.0	0.0	0.0	0.0	14	
Tire & Rubber	4.5	0.0	7.1	7.1	50.0	28.6	0.0	0.0	0.0	7.1	2	
Educational Institutions	4.6	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	45	
Merchandising & Related Services (Retailing Indus.)	4.6	0.0	0.0	4.4	51.1	31.1	11.1	0.0	0.0	2.2	24	
Agribusiness	4.7	0.0	0.0	8.3	33.3	45.8	12.5	0.0	0.0	0.0	10	
Banking, Finance, & Insurance	4.7	0.0	0.0	10.0	40.0	30.0	10.0	10.0	0.0	0.0	33	
Printing, Publishing & Informational Services	4.8	0.0	0.0	3.0	45.5	42.4	3.0	0.0	3.0	3.0	5	
Communication (Radio, TV & Newspaper)	5.0	0.0	0.0	0.0	40.0	40.0	20.0	0.0	0.0	0.0	1	
Automotive & Mechanical Engineering	5.3	0.0	0.0	0.0	0.0	****	0.0	0.0	0.0	0.0	12	
Governmental Administration	5.4	0.0	0.0	8.3	33.3	16.7	25.0	8.3	0.0	8.3	18	
Service Organizations (Boy Scouts, Red Cross)	5.5	0.0	0.0	0.0	27.8	27.8	27.8	11.1	5.6	0.0	2	
Volunteer Organizations (Churches, Peace Corps)	8.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	2	
		0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	50.0		
GRAND MEAN					4.378							

OBSERVATIONS: Those industries giving the highest salary increases (9-10 percent) to their current employees were accounting firms, electrical machinery and equipment organizations, research and consulting services, electronics and instruments organizations, chemicals, drugs, and allied products, hospitals and health services, metals and metal products companies. Those organizations with the smallest salary increases were volunteer organization (up 1-2 percent), service organizations (up 5-6 percent), government administration (up 7-8 percent), automotive and mechanical equipment (up 7-8 percent), communications radio TV and newspaper (up 7-8 percent), printing publishing and information services (up 7-8 percent), banking finance and insurance (up 7-8 percent), and agribusiness (up 7-8 percent).

When calculating starting salary offers for new college graduates in your organization, how important are the following factors? Absolute frequencies are listed on the second line. Answers are listed in mean score order from lowest to highest.

FACTORS	MEAN SCORE	VERY IMP (1)	HIGH IMP (2)	MED IMP (3)	LOW IMP (4)	NOT IMP (5)	VALID CASES
Academic major	2.047	159 (39.7)	148 (<u>38.9</u>)	47 (11.7)	10 (2.5)	37 (9.2)	401
Past work experience	2.122	123 (30.7)	171 (<u>42.9</u>)	72 (18.0)	5 (1.2)	30 (7.5)	401
Degree level achieved	2.334	97 (24.2)	151 (<u>37.7</u>)	102 (25.4)	24 (6.0)	27 (6.7)	401
Major GPA	2.696	47 (11.8)	156 (39.2)	120 (<u>30.2</u>)	21 (5.3)	54 (13.6)	398
Overall GPA	2.821	35 (8.8)	136 (34.3)	144 (<u>36.3</u>)	29 (7.3)	53 (13.4)	397
Aggressiveness	2.907	40 (10.1)	137 (34.6)	115 (<u>29.0</u>)	28 (7.1)	76 (19.2)	396
Institution of preparation	3.049	20 (5.2)	113 (29.3)	144 (<u>37.3</u>)	46 (11.9)	63 (16.3)	386
Campus leadership activities	3.275	15 (3.8)	104 (26.5)	127 (<u>32.3</u>)	52 (13.2)	95 (24.2)	393
Citizenship	3.850	41 (10.4)	60 (15.3)	39 (9.9)	30 (<u>7.6</u>)	223 (56.7)	393
Other Offers	3.899	6 (1.5)	31 (7.8)	101 (25.6)	116 (<u>29.4</u>)	141 (35.7)	395
Race of candidate	4.516	7 (1.8)	12 (3.0)	44 (11.0)	41 (10.3)	295 (<u>73.9</u>)	399
Sex of candidate	4.553	6 (1.5)	11 (2.8)	35 (8.8)	51 (12.8)	295 (<u>74.1</u>)	398
GRAND MEAN	3.170						

OBSERVATIONS: When calculating starting salary offers for new college graduates, the surveyed organizations indicated that the candidate's academic major, past working experiences, and degree level were the most important factors. Those factors receiving ratings of medium importance were the individual's major grade point average, overall grade point average, aggressiveness, institution of preparation, and campus leadership activities. Those factors receiving ratings of low importance were citizenship and the candidate's other offers. The candidate's race and sex received ratings of no importance in determining starting salary offers.

After initial campus interviews, how many WEEKS will elapse normally before most candidates will hear from your organization about your interest or lack of interest?

NUMBER OF WEEKS	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
0	2	.5	.5	.5
1	42	9.8	10.8	11.3
2	148	34.1	37.5	48.8
3	105	24.5	27.0	75.8
4	50	11.7	12.9	88.7
5	13	3.0	3.3	92.0
6	16	3.7	4.1	96.1
7	2	.5	.5	96.7
8	3	.7	.8	97.4
10	1	.2	.3	97.7
12	2	.5	.5	98.2
13	1	.2	.3	98.5
15	1	.2	.3	98.7
20	1	.2	.3	99.0
31	1	.2	.3	99.2
48	1	.2	.3	99.5
52	2	.5	.5	100.0
NO RESPONSE	39	9.1	MISSING	
TOTAL	428	100.0	100.0	

MEAN 3.375

VALID CASES 389

MISSING CASES 39

OBSERVATIONS: After an initial campus interview, candidates on the average can expect to wait 3 weeks or longer before receiving a response from most of the surveyed employers. Of the surveyed employers, 11.3% expect to respond within 1 week, 48.8% within 2 weeks, and the remainder expect to respond within 3 weeks or more.

After interviewing candidates on college campuses, does your organization respond to each interviewee?

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	346	80.8	87.4	87.4
NO	2	50	11.7	12.6	100.0
	0	32	7.5	MISSING	
	TOTAL	428	100.0	100.0	
MEAN		1.126			
VALID CASES		396	MISSING CASES	32	

COMMENTS: As a minimum, many of the surveyed employers (6) would send "no thank you" or "under consideration" letters. Some employers (12) notify candidates during the interview about their interest or rejection. A few only contact those that interest them (6). Some await receipt of applications from candidates even after the interview before responding (6), since they view interviews as principally for the purpose of soliciting applications. Others (5) await potential vacancies before contacting candidates after campus interviews. Even others (3) review credentials of interviewed applicants with department managers and then indicate their interest to applicants. Three (3) use letters for rejections and phone calls for plant visits.

Many governmental agencies use tests for screening applicants and only contact the successful applicants. Other applicants were not contacted at all after taking the tests.

OBSERVATIONS: As one respondent stated, "Organizations that do not respond as a matter of courtesy are viewed very unfavorably by students." Of the surveyed employers, 87.4% respond to the candidates after an interview. The remaining 12.6% do not respond.

Which of the following pre-recruitment activities does your organization use on college campuses? (XHI=Extremely high frequency, HI=high frequency, MED=Medium frequency, LOW=Low frequency, NO=Not used) Absolute frequencies are listed on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest.

		Extremely High Frequency	High Frequency	Medium Frequency	Low Frequency	Not Used	VALID CASES
		(1)	(2)	(3)	(4)	(5)	
PRE-RECRUITMENT ACTIVITIES							
Review resumes/credentials	2.233	124 (31.0)	135 (33.8)	84 (21.0)	38 (9.5)	19 (4.8)	400
Talk with placement office staff members	2.653	55 (13.9)	135 (34.2)	129 (32.7)	44 (11.1)	32 (8.1)	395
Participating in career days/fairs	3.000	43 (10.9)	93 (23.6)	127 (32.2)	83 (21.1)	48 (12.2)	394
Seeking graduating students who have worked for your organization	3.013	58 (15.0)	89 (23.0)	104 (26.9)	62 (16.0)	74 (19.1)	387
Meeting with professor/staff members	3.108	36 (9.1)	98 (24.7)	119 (30.0)	75 (18.9)	69 (17.4)	397
Visits with students/groups	3.139	44 (11.1)	78 (19.7)	124 (31.3)	79 (19.9)	71 (17.9)	396
Sending graduates back to their own campuses for visits and recruiting	3.274	27 (6.9)	89 (22.6)	112 (28.4)	81 (20.6)	85 (21.6)	394
Providing speakers on campuses	3.365	28 (7.2)	71 (18.3)	107 (27.5)	97 (24.9)	86 (22.1)	389
Making presentations to professional clubs	3.578	19 (4.8)	53 (13.5)	115 (29.3)	94 (23.9)	112 (28.5)	393
Classroom presentations	3.677	17 (4.4)	40 (10.3)	112 (28.7)	104 (26.7)	117 (30.0)	390
Financial support to universities	3.756	14 (3.6)	52 (13.4)	92 (23.7)	88 (22.6)	143 (36.8)	389
Tours for students groups	3.778	8 (2.1)	47 (12.6)	101 (27.0)	82 (21.9)	136 (36.4)	374
Tours for college groups	3.854	8 (2.2)	36 (9.9)	94 (25.9)	88 (24.2)	137 (37.7)	363
Tours for faculty/staff members	3.857	7 (1.9)	41 (11.1)	91 (24.6)	90 (24.3)	141 (38.1)	370
Tours for placement staff	3.947	6 (1.7)	38 (10.5)	79 (21.9)	84 (23.3)	154 (42.7)	361
Funding to placement offices	4.370	1 (.3)	10 (2.6)	55 (14.1)	101 (26.0)	222 (57.1)	389
Sending video tapes on organization to placement offices	4.497	6 (1.6)	17 (4.6)	25 (6.8)	59 (16.1)	259 (70.8)	366
GRAND MEAN	3.464						

COMMENTS: As other favorite pre-recruitment activities, the surveyed organizations (8) suggested that employers send literature, brochures, and other printed materials in advance of their campus visits. Heavy advertising campaigns in college newspapers, classified ads, TV and radio spots, posters, and notices in periodicals were used by others (5). Visiting, writing, and calling placement offices were other activities sometimes used. Pre-recruitment meetings, classroom presentations, annual conference attendance, open houses, and annual visits with students, faculty, and placement office professionals were also suggested. Still others used cooperative education experiences, scholarships, internships, and grants as pre-recruitment efforts. Writing letters to professors, faculty advisors, and directly to students were mentioned too.

OBSERVATIONS: Overall, employers reported that they moderately used the suggested pre-recruitment activities. The only activity receiving a rating of high frequency was reviewing resumes and credentials in placement offices. Next on the employers' list of medium frequency activities were talking with placement office staff members, participating in career days/fairs, seeking graduating students who have previously worked for their organization, meeting with professors/staff members, visiting with students/ student groups, sending graduates back to their campuses for recruiting and visits, and providing speakers on campuses. The remaining factors received ratings of low frequency. No pre-recruitment activity on the list received an overall average rating of not used.

Last year (1980-81) in your organization, how many SALARIED positions were NOT filled because shortages of college graduates existed?

NUMBER OF POSITIONS	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
0	207	48.4	70.4	70.4
1	13	3.0	4.4	74.8
2	10	2.3	3.4	78.2
3	11	2.6	3.7	82.0
4	9	2.1	3.1	85.0
5	3	.7	1.0	86.1
6	3	.7	1.0	87.1
7	2	.5	.7	87.8
8	2	.5	.7	88.4
9	2	.5	.7	89.1
10	6	1.4	2.0	91.2
11	1	.2	.3	91.5
16	1	.2	.3	91.8
20	6	1.4	2.0	93.9
22	1	.2	.3	94.2
25	4	.9	1.4	95.6
27	1	.2	.3	95.9
28	1	.2	.3	96.3
30	2	.5	.7	96.9
32	1	.2	.3	97.3
33	1	.2	.3	97.6
34	1	.2	.3	98.0
40	1	.2	.3	98.3
50	3	.7	1.0	99.3
54	1	.2	.3	99.7
57	1	.2	.3	100.0
NO RESPONSE	134	31.3	MISSING	
TOTAL	428	100.0	100.0	

MEAN 3.493

VALID CASES 294 MISSING CASES 134

OBSERVATIONS: Of the surveyed employers who responded to this question, 70.4% indicated that no positions remained unfilled because of shortages of college graduates. Of the remaining 29.6% that indicated unfilled jobs, an average of 3-4 jobs per employer were not filled because of shortages of college graduates.

Last year (1980-81) in your organization, how many SALARIED positions were NOT filled because shortages of college graduates existed?

CATEGORIES OF ORGANIZATIONS	Avg. No. Positions Unfilled	Valid Cases
Accounting	2.1	16
Aerospace & Components	5.6	8
Agribusiness	0.0	8
Automotive & Mechanical Equipment	.4	7
Banking, Finance & Insurance	2.4	23
Chemical, Drugs & Allied Products	2.4	23
Communication (Radio, TV & Newspapers)	0.0	0
Construction & Building Materials Manufacturing	1.8	12
Educational Institutions	.4	32
Electrical Machinery & Equipment	1.5	11
Electronics & Instruments	7.2	17
Food, Beverage Processing & Restaurants	3.3	18
Glass, Paper, Packaging & Allied Products	2.6	12
Government Administration	13.4	10
Hospitals & Health Services	1.0	5
Hotels, Motels, Resorts, Camps & Recreational Facilities	2.8	9
Merchandising & Related Services (Retailing Industries)	1.5	15
Metals & Metal Products	7.9	19
Military	5.5	2
Petroleum & Allied Products	4.7	14
Printing, Publishing & Informational Services	0.0	1
Public Utilities (Including Transportation)	7.9	16
Research & Consulting Services	1.3	12
Service Organizations (Boy Scouts, Red Cross)	0.0	2
Tire & Rubber	2.5	2
Volunteer Organizations (Churches, Peace Corps)	0.0	0
Diversified Conglomerate	6.6	5

OBSERVATIONS: Of those categories of organizations with the greatest numbers of unfilled positions, government administration, aerospace and components, electronics and instruments organizations, metals and metal products, military, petroleum and allied products, public utilities, and diversified conglomerates had the highest numbers. Those categories of organizations with the fewest number of unfilled positions were agricultural business (none), automotive and mechanical equipment (.4 positions per organization), communications-radio, TV, and newspapers (none), educational institutions (.4 positions per organization), hospitals and health services organizations (1.0 positions per organization), printing, publishing, and informational services (none), service organizations-Boy Scouts, Red Cross, etc. (none), and volunteer organizations-churches, Peace Corps, etc. (none).

What academic areas were required for these positions to be filled?

ACADEMIC MAJOR	NUMBER OF RESPONSES
Electrical Engineers	77
Mechanical Engineers	71
Accounting	55
Computer Science	52
Chemical Engineers	42
Civil Engineers	33
General Business Admin	31
Marketing/Sales	27
Education	23
Financial Administration	23
Mathematics	21
Metallurgy/Material Sci	20
Chemistry	15
Physics	14
Agriculture & Nat Res	13
Liberal Arts	9
Personnel	9
Petroleum Engineers	7
Human Ecology	5
Social Sciences	4

OTHER MAJORS: In the engineering areas, nuclear, aerospace, geotechnical, industrial, chemical, textile engineering and computer science were most mentioned. Accounting, financial management, retailing, hotel and restaurant, qualitative analysis, operations research, graphics design, and drafting were listed in business. MSA's with technical undergraduate degrees and engineers for technical sales were also cited. For natural sciences, geology, nursing, physical therapists were listed. School systems mentioned high demand for industrial arts, special education, mathematics and science teachers.

OBSERVATIONS: The academic areas required most often to fill positions that were not filled because of shortages of college graduates were as follows: electrical engineers, mechanical engineers, accounting graduates, computer science graduates, and chemical engineers. These were followed by demand for civil engineers, general business administration, marketing and sales graduates, education graduates (with particular specialities in industrial arts, mathematics, sciences, and special education), financial administration majors, mathematics majors, metallurgical engineers, chemistry majors, and physics majors. Only a few requests were listed for the other academic majors.

When your organization was unable to fill positions with fully qualified individuals, which of the following were most successful for you? Absolute frequencies for each answer are listed on the first line and percentages are listed on the second line. Answers are listed in mean score from lowest to highest.

FACTORS		Extremely High Success	High Success	Medium Success	Low Success	Not Used	VALID CASES
		(1)	(2)	(3)	(4)	(5)	
Left the position vacant until a qualified person was found	2.663	60 (22.2)	82 (30.4)	60 (22.2)	25 (9.3)	43 (15.9)	270
Recruited on college campuses until you found a qualified person	3.075	38 (14.2)	72 (27.0)	54 (20.2)	38 (14.2)	65 (24.3)	267
Hired a competent person and provided on-the-job training	3.192	24 (9.2)	63 (24.2)	71 (27.3)	43 (16.5)	59 (22.7)	260
Provided in-service education for someone closely qualified	3.462	22 (8.7)	48 (19.0)	59 (23.3)	39 (15.4)	85 (33.6)	253
Used third-party placement agencies to find qualified person	3.653	16 (6.1)	46 (17.6)	51 (19.5)	49 (18.7)	100 (38.2)	262
Supported an advanced degree for someone in a related major	4.228	2 (.8)	23 (9.2)	40 (16.0)	36 (14.4)	149 (59.6)	250
GRAND MEAN	3.367						

OBSERVATIONS: When organizations were unable to fill positions with fully qualified individuals, respondents found medium success with the following: leaving the position vacant until a qualified person was found, recruiting on college campuses until a qualified person was found, hiring a competent person and providing on-the-job training, and providing in-service education to someone closely qualified. Little success was found with using third party placement agencies to find a qualified person nor supporting an advanced degree for someone in a related major.

On the average, approximately how many hours of training will a new college hire receive each week during the first 6 months on the job in your organization? Absolute frequencies are listed for each answer on the first line, row percentages on the second line, column percentages on the third line and percentages of total on the fourth line of each block.

CATEGORY OF EMPLOYERS	COUNT ROW COL TOT	PCT PCT	Hours of Training									ROW TOTAL
			NONE	1-2HRS	3-4HRS	5-6HRS	7-8HRS	9-10HRS	11-15HRS	16-20HRS	21+HRS	
ACCTNG	1	1 4.3 6.7 3	1 4.3 2.5 3	4 17.4 10.8 1.1	2 8.7 6.3 5	4 17.4 12.9 1.1	3 13.0 7.0 8	2 8.7 5.6 5	1 4.3 2.6 3	5 21.7 14.9 1.3	23 6.1	
AEROSPACE	2	0 0 0 0	0 0 0 0	2 20.0 9.4 5	2 20.0 6.3 5	1 10.0 3.2 3	0 0 0 0	4 40.0 11.1 1.1	0 0 0 0	1 10.0 1.0 3	10 2.7	
AGRIBUS	3	0 0 0 0	0 0 0 0	1 10.0 2.7 3	2 20.0 6.3 5	1 10.0 3.2 3	0 0 0 0	1 10.0 2.8 3	1 10.0 2.6 3	4 40.0 3.9 1.1	10 2.7	
AUTO	4	0 0 0 0	0 0 0 0	0 0 0 0	1 8.3 3.1 3	3 25.0 9.7 8	2 16.7 4.7 5	1 8.3 2.3 3	1 8.3 2.6 3	4 33.3 3.9 1.1	12 3.2	
BANKING	5	2 6.8 7.3 3	2 9.5 5.0 3	2 9.5 4.4 5	2 9.5 3.3 5	1 3.2 3.2 3	3 8.3 7.0 8	2 5.6 5.6 5	10 27.8 25.6 2.7	13 36.1 12.6 3.5	36 9.6	
CHEM	6	1 6.7 6.3 3	0 0 0 0	2 15.4 4.4 5	2 15.4 3.3 5	3 23.1 9.7 8	1 7.7 2.3 3	1 7.7 2.3 3	1 7.7 2.6 3	2 15.4 1.1 5	13 3.5	
COMMUN	7	0 0 0 0	1 100 2.3 3	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 3	
CONSTRUC	8	0 0 0 0	2 13.3 5.0 3	1 26.7 12.7 3	4 26.7 12.7 3	3 20.0 9.7 8	1 6.7 2.3 3	0 0 0 0	0 0 0 0	4 26.7 12.7 3	15 4.0	
EDUC	9	2 21.7 23.3 1	1 54.5 25.0 3	2 54.5 25.0 3	2 54.5 25.0 3	0 0 0 0	1 2.7 2.3 3	1 2.7 2.3 3	2 54.5 25.0 3	1 2.7 1.0 3	37 9.8	
COMPTRS	10	0 0 0 0	0 0 0 0	2 15.4 4.4 5	0 0 0 0	1 7.7 3.2 3	1 7.7 2.3 3	3 23.1 8.3 8	2 15.4 5.1 5	4 30.8 3.9 1.1	13 3.5	
ELECTRNC	11	0 0 0 0	1 25.0 10.3 3	2 15.4 5.4 5	3 15.4 4.4 5	0 0 0 0	5 26.7 11.6 3	2 10.3 5.6 5	4 21.1 10.3 1.1	2 10.3 1.9 5	19 5.1	
FOOD	12	0 0 0 0	1 25.0 10.3 3	1 25.0 10.3 3	0 0 0 0	1 3.3 2.3 3	1 5.0 2.3 3	2 10.3 5.6 5	4 20.0 10.3 1.1	10 50.0 9.7 2.7	20 5.3	
GLASS	13	0 0 0 0	0 0 0 0	1 25.0 10.3 3	2 16.7 6.2 5	0 0 0 0	4 33.3 9.7 1.1	1 5.0 1.1 3	0 0 0 0	3 25.0 2.9 8	12 3.2	
GOVT	14	0 0 0 0	2 11.1 5.0 5	4 22.2 10.8 1.1	0 0 0 0	2 11.1 5.0 5	3 16.7 7.0 8	1 5.6 2.3 3	3 16.7 7.7 8	3 16.7 2.9 8	18 4.8	
HEALTH	15	0 0 0 0	1 14.3 2.5 3	0 0 0 0	1 14.3 3.3 3	0 0 0 0	3 42.9 7.0 8	1 14.3 2.5 3	0 0 0 0	1 14.3 1.0 3	7 1.9	
HOTEL	16	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	2 18.2 5.6 5	2 18.2 5.6 5	7 63.6 6.8 1.9	11 2.9	
MERCHNDS	17	0 0 0 0	1 23.8 5.3 3	1 23.8 2.7 3	4 15.4 12.5 1.1	2 7.7 5.5 5	3 11.5 7.0 8	2 7.7 5.6 5	1 23.8 2.6 3	12 46.2 11.7 3.2	26 6.9	
METAL	18	1 4.8 6.7 3	1 4.3 2.5 3	4 19.0 10.8 1.1	0 0 0 0	2 9.9 5.5 5	3 23.8 11.6 1.3	2 9.9 5.5 5	0 0 0 0	6 28.6 11.6 1.3	21 5.6	
MILITARY	19	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 25.0 2.5 3	0 0 0 0	3 75.0 2.9 8	4 1.1	
PETRO	20	1 9.1 6.7 3	1 9.1 2.5 3	3 27.3 8.1 8	0 0 0 0	0 0 0 0	1 9.1 2.3 3	1 9.1 2.8 3	3 27.3 7.7 8	1 9.1 1.0 3	11 2.9	

Hours of Training Received (Continued)

CATEGORY OF EMPLOYERS	COUNT ROW COL TOT	PCT PCT PCT	Hours of Training									ROW TOTAL
			NONE	1-2HRS	3-4HRS	5-6HRS	7-8HRS	9-10HRS	11-15HRS	16-20HRS	21+HRS	
			1	2	3	4	5	6	7	8	9	
PRINT	21		0 0 0	0 0 0	1 20.0 2.7 3	0 0 0	0 0 0	1 20.0 2.3 3	0 0 0	0 0 0	3 60.0 2.8 8	5 1.3
UTIL	22		0 0 0	1 4.1 2.8 3	3 11.3 3.1 8	3 9.1 3.0 3	1 4.1 3.3 3	1 4.1 2.3 3	2 7.9 3.3 3	1 4.1 2.8 3	10 47.6 9.7 2.7	21 5.6
RSRCH	23		2 11.3 13	3 17.6 7.5 8	0 0 0	1 5.9 3.3 3	4 23.7 12.5 1.1	3 17.6 7.0 8	2 11.3 5.5 5	2 11.3 5.5 5	0 0 0	17 4.5
SERVICE	24		0 0 0	0 0 0	0 0 0	1 5.0 3.3 3	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	2 .5
TIRE	25		0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	1 5.0 2.3 3	0 0 0	0 0 0	1 5.0 1.0 3	2 .5
VOLUNT	26		0 0 0	1 5.0 2.8 3	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	1 5.0 1.0 3	2 .5
DIVERS	27		0 0 0	1 12.1 2.8 3	1 12.1 2.7 3	1 12.1 3.1 3	1 12.1 3.3 3	0 0 0	1 12.1 2.8 3	1 12.1 2.8 3	2 25.0 1.9 5	8 2.1
COLUMN TOTAL			15 4.0	40 10.6	37 9.8	32 8.5	31 8.2	42 11.4	36 9.6	39 10.4	103 27.4	376 100.0

NUMBER OF MISSING OBSERVATIONS = 52

OBSERVATIONS: For the surveyed employers providing training for their new hires, approximately nine to ten hours per week of training were given new college hires during the first six months on the job in the surveyed organizations. Several of the surveyed employers (103) provided 21 hours or more per week of training during the first six months on the job. Organizations providing the most training for new college hires were the military, merchandising and retail services, hotels, motels, and recreational facilities, printing and publishing services, and utilities. Organizations providing the least training were educational institutions.

How important are the following factors when evaluating the performance of new college hires in your organization? (XHI=of extremely high importance, HI=of high importance, MED=of medium importance, LOW=of low importance, NO=of no importance) Absolute frequencies for each answer are listed on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest.

FACTORS	MEAN SCORE	VERY IMP (1)	HIGH IMP (2)	MED IMP (3)	LOW IMP (4)	NO IMP (5)	VALID CASES
Ability to get things done	1.505	232 (56.6)	150 (36.6)	27 (6.6)	1 (.2)	0 (0.0)	410
Common Sense	1.618	202 (50.1)	158 (39.2)	39 (9.7)	3 (.7)	1 (.2)	403
Honesty/Integrity	1.659	188 (46.8)	168 (41.8)	42 (10.4)	3 (.7)	1 (.2)	402
Dependability	1.662	181 (44.7)	182 (44.9)	40 (9.9)	2 (.5)	0 (0.0)	405
Initiative	1.684	162 (40.3)	207 (51.5)	32 (8.0)	0 (0.0)	1 (.2)	402
Well developed work habits	1.697	167 (41.1)	195 (48.0)	44 (10.8)	0 (0.0)	0 (0.0)	406
Reliability	1.743	166 (42.2)	171 (43.5)	50 (12.7)	3 (.8)	3 (.8)	393
Interpersonal skills	1.823	146 (36.5)	183 (45.8)	68 (17.0)	2 (.5)	1 (.3)	400
Enthusiasm	1.825	153 (37.7)	180 (44.3)	66 (16.3)	5 (1.2)	2 (.5)	406
Judgment skills	1.856	131 (32.6)	202 (50.2)	67 (16.7)	0 (0.0)	2 (.5)	402
Motivation to achieve	1.881	125 (31.6)	201 (50.8)	65 (16.4)	2 (.5)	3 (.8)	396
Adaptability	1.934	119 (29.2)	207 (50.7)	73 (17.9)	8 (2.0)	1 (.2)	408
Intelligence	1.935	112 (28.2)	203 (51.1)	79 (19.9)	2 (.5)	1 (.3)	397
Decision making skills	1.938	121 (30.0)	198 (49.1)	74 (18.4)	8 (2.0)	2 (.5)	403
Oral Communication skills	1.940	120 (30.1)	193 (48.4)	74 (18.5)	6 (1.5)	6 (1.5)	399
Energy level	1.961	129 (31.8)	171 (42.1)	100 (24.6)	5 (1.2)	1 (.2)	406
Problem-solving abilities	1.992	117 (29.8)	175 (44.5)	91 (23.2)	7 (1.8)	3 (.8)	393
Attitude toward work ethic	1.993	117 (29.1)	193 (48.0)	73 (18.2)	16 (4.0)	3 (.7)	402
Mental alertness	1.995	95 (24.1)	212 (53.7)	83 (21.0)	5 (1.3)	0 (0.0)	395
Emotional control	2.052	109 (27.1)	179 (44.5)	103 (25.6)	6 (1.5)	5 (1.2)	402
Flexibility	2.054	99 (24.3)	202 (49.6)	94 (23.1)	9 (2.2)	3 (.7)	407
Maturity	2.068	102 (25.7)	181 (45.6)	103 (25.9)	7 (1.8)	4 (1.0)	397
Innovative ideas	2.072	103 (25.7)	179 (44.6)	107 (26.7)	11 (2.7)	1 (.2)	401
Responsiveness	2.082	83 (20.7)	206 (51.4)	109 (27.2)	2 (.5)	1 (.2)	401
Technical expertise	2.203	92 (23.0)	182 (45.5)	91 (22.8)	23 (5.8)	12 (3.0)	400
Written communications skills	2.217	85 (21.5)	165 (41.7)	125 (31.6)	17 (4.3)	4 (1.0)	396
Leadership	2.219	86 (21.6)	172 (43.2)	114 (28.6)	19 (4.8)	7 (1.8)	398
Personality	2.265	79 (20.2)	166 (42.3)	119 (30.4)	20 (5.1)	8 (2.0)	392
Willingness to take extra assignments	2.275	68 (17.1)	181 (45.6)	125 (31.5)	17 (4.3)	6 (1.5)	397
Self esteem	2.305	55 (13.6)	155 (48.4)	134 (33.3)	13 (3.2)	6 (1.5)	403
Friendliness	2.311	73 (18.0)	165 (40.7)	139 (34.3)	24 (5.9)	4 (1.0)	405
Courteous	2.317	74 (18.3)	159 (39.4)	145 (35.9)	21 (5.2)	5 (1.2)	404

Importance of factors when evaluating performance of new college hires (Continued)

FACTORS	MEAN SCORE	VERY IMP (1)	HIGH IMP (2)	MED IMP (3)	LOW IMP (4)	NO IMP (5)	VALID CASES
Directness	2.326	67 (16.5)	161 (35.8)	156 (38.5)	20 (4.9)	1 (.2)	405
Knowledge of work expectancy	2.365	57 (14.4)	163 (41.3)	153 (38.7)	18 (4.6)	4 (1.0)	395
Career preparation	2.452	49 (12.0)	180 (44.2)	136 (33.4)	29 (7.1)	13 (3.2)	407
Previous career related work experiences	2.548	60 (15.2)	144 (36.4)	132 (33.3)	35 (8.8)	25 (6.3)	396
Understanding of practical business world	2.561	41 (10.3)	150 (37.6)	165 (41.4)	29 (7.3)	14 (3.5)	399
Appropriate establishment views/lifestyle	2.588	54 (13.6)	136 (34.2)	141 (35.4)	54 (13.6)	13 (3.3)	398
Suitable appearance	2.633	35 (8.7)	136 (33.7)	182 (45.2)	42 (10.4)	8 (2.0)	403
Knowledge of work organization	2.641	35 (8.8)	124 (31.2)	195 (49.0)	37 (9.3)	7 (1.8)	393
Career & work aspiration well-defined	2.653	33 (8.2)	147 (36.4)	163 (40.3)	49 (12.1)	12 (3.0)	404
Academic major	2.709	63 (15.4)	131 (32.0)	114 (27.9)	64 (15.6)	37 (9.0)	409
Sense of humor	2.757	27 (6.7)	126 (31.2)	190 (47.0)	40 (9.9)	21 (5.2)	404
Willingness to relocate	2.798	65 (16.4)	113 (28.5)	108 (27.3)	57 (14.4)	53 (13.4)	396
Course in business	2.916	53 (14.8)	82 (23.0)	116 (32.5)	54 (15.1)	52 (14.6)	357
Grade point average (major)	2.952	31 (7.8)	118 (29.6)	133 (33.3)	73 (18.3)	44 (11.0)	399
Part-time and/or summer work experiences	2.980	37 (9.3)	95 (23.9)	146 (36.8)	77 (19.4)	42 (10.6)	397
Familiarity with professional options	2.987	20 (5.0)	100 (25.2)	172 (43.3)	75 (18.9)	30 (7.6)	397
Socialability	2.990	14 (3.5)	94 (23.6)	200 (50.3)	62 (15.6)	28 (7.0)	398
Degree level	3.077	26 (6.5)	96 (23.9)	144 (35.9)	91 (22.7)	44 (11.0)	401
Grade point average (overall)	3.082	18 (4.5)	104 (25.8)	152 (37.7)	85 (21.1)	44 (10.9)	403
Courses in management	3.227	24 (7.0)	63 (18.3)	131 (38.1)	63 (18.3)	63 (18.3)	344
Courses in Communication	3.266	24 (7.2)	61 (18.2)	122 (36.4)	58 (17.3)	70 (20.9)	335
Understanding of American economy	3.306	7 (1.8)	49 (12.5)	191 (48.7)	107 (27.3)	38 (9.7)	392
Course in computer science/data processing	3.360	20 (5.8)	61 (17.7)	116 (33.7)	69 (20.1)	78 (22.7)	344
Prior experiences in college activities and athletics	3.396	9 (2.3)	65 (16.4)	147 (37.1)	110 (27.8)	65 (16.4)	396
Class ranking	3.429	14 (3.4)	55 (13.5)	148 (36.5)	121 (29.8)	68 (16.7)	406
Recommendations from former employers	3.459	20 (5.2)	72 (18.7)	103 (26.7)	93 (24.1)	98 (25.4)	386
Candidate's prior knowledge of your organization	3.544	11 (2.7)	45 (11.1)	129 (31.8)	154 (37.9)	67 (16.5)	406
Previous work experiences unrelated to candidate's career goals	3.587	4 (1.0)	36 (9.1)	144 (36.5)	146 (37.0)	65 (16.5)	395
Course in statistics	3.642	10 (3.0)	33 (9.9)	110 (32.8)	96 (28.7)	86 (25.7)	335
Academic minors	3.689	9 (2.2)	26 (6.5)	130 (32.3)	153 (38.1)	84 (20.9)	402
Publications	3.942	8 (2.0)	19 (4.8)	85 (21.9)	158 (40.1)	124 (31.5)	394
Recommendations from student teaching	4.000	25 (6.7)	25 (6.7)	55 (14.7)	89 (23.8)	180 (48.1)	374
Course in career counseling	4.203	2 (.6)	6 (1.8)	69 (21.2)	95 (29.2)	153 (47.1)	325
Recommendations from ministers	4.332	1 (.3)	10 (2.7)	58 (15.4)	102 (27.1)	208 (54.6)	377

Importance of factors when evaluating performance of new college hires (Continued)

FACTORS	MEAN SCORE	VERY IMP (1)	HIGH IMP (2)	MED IMP (3)	LOW IMP (4)	NO IMP (5)	VALID CASES
Recommendations from Politicians	4.417	0 (0.0)	8 (2.1)	48 (12.5)	104 (27.1)	224 (58.3)	384
Marital status of candidate	4.596	2 (.5)	14 (3.5)	24 (6.1)	62 (15.7)	294 (74.2)	396
Sex of candidate	4.663	3 (.7)	7 (1.7)	28 (7.0)	46 (11.5)	317 (79.1)	401
Race of candidate	4.673	3 (.8)	10 (2.5)	28 (7.1)	31 (7.9)	322 (81.7)	394
GRAND MEAN	2.667						

OTHERS: When listing factors for evaluating performance of new college hires, the surveyed employers named a few others: time management, completion of work on projects schedule, thought processes, organizational skills, verbal communication skills, willingness to travel, and the ability of candidate to pass state boards (especially for nurses). As one employer indicated, the factors for measuring performance vary across departments and requirements of jobs.

OBSERVATIONS: The most important factors when evaluating the performance of new college hires in the surveyed organizations were the ability to get things done, common sense, honesty and integrity, dependability, initiative, well-developed habits/hard-working, reliability, interpersonal skills, enthusiasm, judgement skills, motivation to achieve, adaptability to available jobs, aggressiveness, intelligence, decision-making skills, oral communication skills, energy level, problem-solving abilities, attitude toward the work ethic, mental alertness, emotional control, flexibility, maturity, innovative ideas, and responsiveness. The remaining list of factors is shown above in order of importance.

The least important factors according to the surveyed employers were race of candidate, sex of candidate and marital status. These factors received a rating of no importance when evaluating the performance of new college hires in their organization.

Which of the following professional development activities are provided by your organization to new college hires? (XH=Extra high frequency, HI=High frequency, MED=Medium frequency, LOW=low frequency, NO=No frequency). Absolute frequencies for each answer are listed on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest.

		Extremely High Frequency	High Frequency	Medium Frequency	Low Frequency	Not Used at all	VALID CASES
		(1)	(2)	(3)	(4)	(5)	
PROFESSIONAL DEVELOPMENT ACTIVITIES							
On-the-job training	1.633	239 (58.0)	109 (26.5)	46 (11.2)	12 (2.9)	6 (1.5)	412
Formal training from organization personnel	2.311	117 (28.4)	135 (32.8)	90 (21.8)	55 (13.3)	15 (3.6)	412
Orientation sessions	2.344	102 (26.0)	122 (31.1)	108 (27.6)	51 (13.0)	9 (2.3)	392
Written materials	2.394	87 (21.2)	129 (31.4)	147 (35.8)	42 (10.2)	6 (1.5)	411
Seminars by professional organizations	2.710	45 (11.0)	128 (31.2)	161 (39.3)	53 (12.9)	23 (5.6)	410
Classes	2.737	67 (16.8)	109 (27.3)	119 (29.8)	70 (17.5)	34 (8.5)	399
Advanced degrees	3.047	44 (10.9)	99 (24.6)	123 (30.5)	68 (16.9)	69 (17.1)	403
Presentations by consultants	3.215	24 (5.9)	82 (20.0)	131 (32.0)	128 (31.2)	45 (11.0)	410
GRAND MEAN	2.548						

COMMENTS: The surveyed organizations suggested other professional development activities provided by their organizations. These included video training, counseling on the job, internships, formal management development programs, in-service seminars, internal meetings with office and divisional personnel, an administrator working directly with the new staff member, and formal training programs provided by outside consultants.

OBSERVATIONS: When rating the frequency of professional development activities provided by their organizations to new college hires, employers indicated that on-the-job training was used most frequently, followed by formal training by organization personnel, orientation sessions, and written materials provided by the employing organizations. Provided with medium frequency were seminars by professional organizations, classes given by the employing organizations, advanced degrees provided by educational institutions nearby, and least frequently but still often used were presentations by consultants. The overall rating was medium for the professional development activities suggested.

What percentage of new college hires in each group leave your organization within the time periods specified? Average absolute percentages for each answer are listed on the first line, and number of responses are listed on the second line.

TYPES OF GRADUATES	WITHIN 3 MONTHS	WITHIN 6 MONTHS	WITHIN 1 YEAR	WITHIN 3 YEARS	WITHIN 5 YEARS
All college graduates	2.66 (97)	4.99 (97)	8.73 (123)	17.64 (128)	28.35 (128)
Engineering graduates	2.11 (45)	2.54 (48)	6.20 (64)	13.97 (72)	21.80 (74)
Business graduates	1.76 (51)	2.65 (52)	9.05 (76)	18.94 (80)	27.05 (80)
Other non-technical graduates	1.57 (28)	2.96 (26)	7.16 (25)	13.61 (33)	19.78 (36)

OBSERVATIONS: When questioned about the percentage of new college hires leaving their organizations, the surveyed employers indicated that approximately 3% of all new college graduates leave within the first three months, 5% within the first six months, and approximately 9% within the first year. Within three years approximately 18% have left the surveyed organizations, and within five years approximately 28% have left. The percentages of engineering graduates leaving are slightly lower, but the percentages of business graduates leaving are approximately the same as those for all new college graduates.

What percentage of new college hires in each group leave your organization within the time periods specified? Average absolute percentages for each answer are listed on the first line, and number of responses are listed on the second line.

CATEGORIES OF ORGANIZATIONS	WITHIN 3 MONTHS	WITHIN 6 MONTHS	WITHIN 1 YEAR	WITHIN 3 YEARS	WITHIN 5 YEARS
Accounting	2.60 (5)	13.43 (7)	9.33 (6)	27.57 (7)	66.23 (6)
Aerospace & Components	9.00 (1)	3.50 (2)	3.23 (4)	7.75 (4)	23.33 (3)
Agribusiness	4.00 (4)	16.80 (5)	23.17 (6)	13.67 (6)	39.00 (5)
Automotive & Mechanical Equipment	3.33 (3)	5.00 (3)	8.75 (4)	31.25 (4)	21.00 (5)
Banking, Finance & Insurance	.50 (6)	1.20 (5)	10.78 (9)	19.83 (6)	38.33 (9)
Chemical, Drugs & Allied Products	.25 (4)	.75 (4)	3.75 (8)	12.17 (6)	22.57 (7)
Communication (Radio, TV & Newspapers)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
Construction & Building Materials Manufacturing	3.00 (5)	11.25 (4)	23.75 (4)	39.17 (6)	52.00 (5)
Educational Institutions	4.64 (11)	.27 (11)	5.41 (17)	12.00 (18)	18.24 (17)
Electrical Machinery & Equipment	3.00 (4)	1.75 (4)	3.75 (4)	10.00 (4)	16.17 (6)
Electronics & Instruments	9.50 (2)	1.00 (2)	1.00 (2)	38.00 (5)	32.33 (3)
Food, Beverage Processing & Restaurants	1.00 (6)	3.83 (6)	14.75 (8)	20.14 (7)	33.83 (6)
Glass, Paper, Packaging & Allied Products	1.40 (5)	2.33 (6)	8.00 (7)	15.00 (8)	24.89 (9)
Government Administration	.50 (2)	1.00 (2)	10.00 (4)	7.50 (2)	7.00 (3)
Hospitals & Health Services	12.50 (4)	.50 (2)	2.00 (2)	7.67 (3)	12.50 (2)
Hotels, Motels, Resorts, Camps & Recreational Facilities	1.67 (3)	11.67 (3)	16.67 (3)	33.33 (3)	40.75 (4)
Merchandising & Related Services (Retailing Industries)	1.25 (8)	3.29 (7)	8.14 (7)	16.38 (8)	27.71 (7)
Metals & Metal Products	0.00 (3)	.17 (6)	3.17 (6)	10.67 (6)	19.75 (8)
Military	20.00 (1)	1.00 (1)	1.00 (1)	1.00 (1)	30.00 (2)
Petroleum & Allied Products	.33 (3)	30.33 (3)	23.00 (3)	9.33 (3)	25.50 (4)
Printing, Publishing & Informational Services	2.50 (2)	5.00 (2)	12.50 (2)	32.50 (2)	47.50 (2)
Public Utilities (Including Transportation)	.29 (7)	2.00 (6)	2.13 (8)	8.20 (10)	9.78 (5)
Research & Consulting Services	.67 (3)	1.00 (3)	8.50 (4)	27.33 (6)	31.00 (4)
Service Organizations (Boy Scouts, Red Cross)	0.00 (1)	0.00 (1)	2.00 (1)	5.00 (1)	5.00 (1)
Tire & Rubber	0.00 (1)	2.00 (1)	3.00 (1)	10.00 (1)	40.00 (1)
Volunteer Organizations (Churches, Peace Corps)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
Diversified Conglomerate	0.00 (1)	0.00 (1)	2.50 (2)	5.00 (1)	0.00 (0)

OBSERVATIONS: According to the accounting firms surveyed, approximately 66% of their new college hires leave within five years. The percentages decrease from there. For instance, construction and building materials manufacturers lose approximately 52% of their new hires within five years, and printing, publishing and informational services lose approximately 44% of theirs.

Within the first year approximately 10% of the new hires in accounting firms have left, 23% in agribusiness, 11% in banking, 24% in construction and building materials, 15% in food, beverage processing in restaurants, 10% in government, 17% in hotels, motels, and recreational facilities, and 23% from petroleum and allied products.

In your organization, what change in hiring, if any, has occurred as a result of EEO programs in the last one to three years? Absolute frequencies for each answer are listed on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest.

TYPES OF GRADUATES	MEAN SCORE	Significant Increase (1)	Some Increase (2)	Same (3)	Some Decrease (4)	Significant Decrease (5)	Valid Cases
Women	2.192	75 (19.2)	168 (43.0)	146 (37.3)	2 (.5)	0 (0.0)	391
Minorities	2.312	44 (11.3)	188 (48.1)	152 (38.9)	7 (1.8)	0 (0.0)	391
GRAND MEAN	2.252						

OBSERVATIONS: When rating the change in hiring that has occurred in their organizations as a result of EEO programs in the last 1-3 years, the surveyed employees indicated that an increase in women and minority hiring has occurred.

From your perspective, how important are the following factors to new college graduates who work for your organization (XHI=Extremely high importance, HI=High importance, MED=Medium importance, LOW=Low importance, NO=No importance) Absolute frequencies for each answer are listed on first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest.

FACTORS	MEAN SCORE	VERY IMP (1)	HIGH IMP (2)	MED IMP (3)	LOW IMP (4)	NOT IMP (5)	VALID CASES
Interesting work	1.646	172 (43.4)	197 (49.7)	23 (5.8)	3 (.8)	1 (.3)	396
Promotion and growth in the organization	1.724	175 (43.9)	171 (42.9)	44 (11.0)	6 (1.5)	3 (.8)	399
Supervisor's appreciation of work done	1.770	145 (36.3)	208 (52.0)	42 (10.5)	4 (1.0)	1 (.3)	400
Feeling of being in on things	1.942	98 (24.8)	228 (57.7)	64 (16.2)	4 (1.0)	1 (.3)	395
Good wages	2.141	64 (16.1)	225 (56.5)	99 (24.9)	9 (2.3)	1 (.3)	398
Good working conditions	2.223	62 (15.5)	199 (49.9)	126 (31.6)	11 (2.8)	1 (.3)	399
Employer loyalty to employees	2.226	66 (16.5)	195 (48.9)	121 (30.3)	16 (4.0)	1 (.3)	399
Job security	2.419	57 (14.4)	151 (38.1)	154 (38.9)	33 (8.3)	1 (.3)	396
Tactful disciplining	2.541	39 (9.9)	150 (38.1)	163 (41.4)	37 (9.4)	5 (1.3)	394
Sympathetic help on personal problems	2.914	20 (5.1)	96 (24.2)	183 (46.2)	92 (23.2)	5 (1.3)	396
GRAND MEAN	2.154						

OBSERVATIONS: Those factors with the most importance to college graduates who work for their organizations, according to surveyed employers, are interesting work, promotion and growth in the organization, and the supervisor's appreciation of work done. These factors were followed in importance by a feeling of being in on things, good wages, good working conditions, employer's loyalty to employees, and job security. The least important factors according to these employers were tactful disciplining and sympathetic help on personal problems. The latter two factors received a rating of only medium importance according to the employers who responded to this survey.

What trends do you foresee in the work environment of your organization for the following? The number of responses are listed on the first line. Answers are listed in mean score order from lowest to highest.

USE OF	MEAN SCORE	50% or 25- More 49%		11- 24%		Increase 9-10%		7- 8%	5- 6%	3- 4%	1- 2%	Remain the Same	1- 2%	3- 4%	5- 6%	Decrease 7- 8% 9-10%		11- 24%	25- 49%	50- 100%	Cases
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	CASES		
Computer applications	4.2	38	42	80	103	8	31	23	5	42	0	0	0	0	0	0	0	0	0	372	
		10.2	11.3	21.5	27.7	2.2	8.3	6.2	1.3	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Word processing	5.0	33	31	50	89	20	26	23	19	70	0	0	0	0	0	0	0	0	1	362	
		9.1	8.6	13.8	24.6	5.5	7.2	6.4	5.2	19.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.3		
Electronic communications	6.1	20	20	26	57	20	25	21	16	123	0	0	0	0	0	0	0	0	1	329	
		6.1	6.1	7.9	17.3	6.1	7.6	6.4	4.9	37.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.3		
Teleprocessing	6.6	15	15	21	54	17	20	15	20	148	0	0	0	0	0	1	0	0	1	327	
		4.6	4.6	6.4	16.5	5.2	6.1	4.6	6.1	45.3	0.0	0.0	0.0	0.0	0.0	.3	0.0	0.0	.3		
Automatic filing systems	7.4	11	10	17	21	6	16	22	32	178	0	0	0	0	0	0	0	0	1	314	
		3.5	3.2	5.4	6.7	1.9	5.1	7.0	10.2	56.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.3		
Paperless offices	7.7	10	6	7	22	10	13	22	18	196	0	0	2	0	1	0	0	0	1	308	
		3.2	1.9	2.3	7.1	3.2	4.2	7.1	5.8	63.6	0.0	0.0	.6	0.0	.3	0.0	0.0	.3			
GRAND MEAN		6.096																			

OBSERVATIONS: The overall trend in their work environment according to the surveyed employers was an increase of approximately 5-6% in automated office processes. The processes rated highest were computer applications (an increase of 9-10% in the next 1 to 3 years). This was followed by an estimated increase of approximately 7-8% in word processing, approximately 5-6% for electronic communications, and an increase of approximately 3-4% for both data processing and automatic filing systems. A paperless office received a rating of only 1-2% increase according to the surveyed employers.

Information about anticipated trends in the work environment of organizations might be helpful to high school and college students as they choose courses and skills to add to their repertoire. The very strong emphasis on computer applications should give students a hint about courses that could be helpful in their future careers.

What were your most successful methods for recruiting ALL college graduates into your organization last year (1980-81)? (XHI=Extremely high success, HI=High success, MED=Medium success, LOW=Low success, NO=No success.) Absolute frequencies for each answer are listed on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest.

RECRUITMENT METHODS	MEAN SCORE	Extremely High Success (1)	High Success (2)	Medium Success (3)	Low Success (4)	No Success (5)	VALID CASES
On-campus interviewing	1.913	183 (51.5)	87 (24.5)	42 (11.8)	19 (5.4)	24 (6.8)	355
Referrals from current employees of your organization	3.243	17 (4.6)	78 (21.0)	121 (32.6)	108 (29.1)	47 (12.7)	371
Job listings with placement offices	3.280	29 (8.0)	65 (17.9)	106 (29.1)	103 (28.3)	61 (16.8)	364
Write-ins	3.289	16 (4.4)	64 (17.4)	133 (36.2)	106 (28.9)	48 (13.1)	367
Referrals from college faculty/staff	3.635	10 (2.7)	37 (10.2)	108 (29.7)	130 (35.7)	79 (21.7)	364
Walk-ins	3.669	11 (3.0)	32 (8.7)	106 (28.7)	139 (37.7)	81 (22.0)	369
Summer employment	3.678	16 (4.4)	56 (15.4)	81 (22.3)	86 (23.7)	124 (34.2)	363
Responses from want ads	3.681	16 (4.4)	48 (13.3)	89 (24.7)	90 (24.9)	118 (32.7)	361
Cooperative education programs	3.723	25 (7.0)	37 (10.4)	75 (21.0)	95 (26.6)	125 (35.0)	357
Internship programs	3.796	21 (5.9)	44 (12.3)	70 (19.6)	74 (20.7)	148 (41.5)	357
Unsolicited referrals from placement offices	3.905	7 (1.9)	21 (5.8)	71 (19.8)	160 (44.6)	100 (27.9)	359
Part-time employment	3.997	10 (2.8)	34 (9.4)	68 (18.8)	85 (23.5)	165 (45.6)	362
Career fairs	4.000	7 (2.0)	21 (5.9)	80 (22.5)	105 (29.5)	143 (40.2)	356
Professional journals	4.206	3 (.9)	21 (6.2)	51 (15.0)	93 (27.4)	172 (50.6)	340
Referrals from campus organizations	4.208	0 (0.0)	13 (3.6)	56 (15.5)	135 (37.4)	157 (43.5)	361
Job listings with employment agencies	4.319	6 (1.6)	22 (6.0)	44 (12.1)	70 (19.2)	222 (61.0)	364
Referrals from community groups	4.486	1 (.3)	2 (.6)	26 (7.2)	124 (34.3)	209 (57.7)	362
GRAND MEAN	3.706						

COMMENTS: Another very successful method mentioned by one organization was recruiter sourcing.

OBSERVATIONS: When recruiting new college graduates, the surveyed employers indicate that on campus interviewing was the most successful method for recruiting these individuals. This method received a rating of high success. Receiving a rating of medium success were referrals from current employees of their organizations, job listings with placement offices, and write-ins. The remaining methods received ratings of low success. Of these the most successful were referrals from college faculty members, walk-ins, hires from summer employees working for their organizations, responses from want aids, and hires from cooperative education programs conducted by their organizations. The least successful were referrals from community organizations and job listings with employment agencies.

What were your most successful methods for recruiting WOMEN college graduates into your organization last year (1980-81)? (XHI=Extremely high success, HI=High success, MED=Medium success, LOW=Low success, NO=No success.) Absolute frequencies for each answer are listed on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest.

RECRUITMENT METHODS	MEAN SCORE	Extremely High Success	High Success	Medium Success	Low Success	No Success	VALID CASES
		(1)	(2)	(3)	(4)	(5)	
On-campus interviewing	2.078	123 (47.7)	56 (21.7)	38 (14.7)	18 (7.0)	23 (8.9)	258
Write-ins	3.395	8 (3.1)	41 (15.7)	94 (36.0)	76 (29.1)	42 (16.1)	261
Referrals from current employees of your organization	3.401	8 (2.9)	52 (19.1)	86 (31.6)	75 (27.6)	51 (18.8)	272
Job listings with placement offices	3.401	22 (8.2)	40 (15.0)	75 (28.1)	69 (25.8)	61 (22.8)	267
Summer employment	3.711	17 (6.4)	29 (10.9)	64 (24.1)	60 (22.6)	96 (36.1)	266
Walk-ins	3.741	4 (1.5)	30 (11.3)	67 (25.2)	95 (35.7)	70 (26.3)	266
Referrals from college faculty/staff	3.762	11 (4.2)	30 (11.3)	62 (23.4)	70 (26.4)	92 (34.7)	265
Responses from want ads	3.771	9 (3.3)	26 (9.6)	69 (25.5)	81 (29.9)	86 (31.7)	271
Cooperative education programs	3.847	17 (6.5)	25 (9.5)	47 (17.9)	65 (24.8)	108 (41.2)	262
Internship programs	3.891	16 (6.3)	25 (9.8)	45 (17.6)	55 (21.5)	115 (44.9)	256
Unsolicited referrals from placement offices	3.969	7 (2.7)	18 (6.9)	53 (20.4)	80 (30.8)	102 (39.2)	260
Part-time employment	3.992	3 (1.1)	16 (6.0)	43 (16.2)	121 (45.7)	82 (30.9)	265
Career fairs	4.053	7 (2.7)	21 (8.0)	52 (19.7)	55 (20.8)	129 (48.9)	264
Professional journals	4.242	1 (.4)	14 (5.2)	36 (13.4)	86 (32.0)	132 (49.1)	269
Referrals from campus organizations	4.300	2 (.8)	12 (4.7)	30 (11.9)	73 (28.9)	136 (53.8)	253
Job listings with employment agencies	4.373	5 (1.8)	18 (6.6)	26 (9.6)	44 (16.2)	178 (65.7)	271
Referrals from community groups	4.517	0 (0.0)	3 (1.1)	20 (7.5)	80 (30.0)	164 (61.4)	267
GRAND MEAN	3.793						

OBSERVATIONS: When recruiting women college graduates, the most successful method according to the surveyed employers was on campus interviewing, with a rating of high success. Three methods received a rating of medium success. These included write-ins, referrals from current employees of their organizations, and job listings with placement offices. The only source receiving a rating of no success was referrals from community groups. The other methods received a rating of low success.

What were your most successful methods for recruiting MINORITY college graduates into your organization last year (1980-81)? (XHI= Extremely high success, HI=High success, MED=Medium success, LOW=Low success, NO=No success.) Absolute frequencies for each answer are listed on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest.

RECRUITMENT METHODS	MEAN SCORE	Extremely High Success (1)	High Success (2)	Medium Success (3)	Low Success (4)	No Success (5)	VALID CASES
On-campus interviewing	2.474	93 (37.1)	53 (21.1)	34 (13.5)	35 (13.9)	36 (14.3)	251
Referrals from current employees of your organization	3.466	14 (5.3)	42 (15.9)	77 (29.2)	69 (26.1)	62 (23.5)	264
Write-ins	3.466	11 (4.3)	33 (13.0)	83 (32.8)	79 (31.2)	47 (18.6)	253
Job listings with placement offices	3.558	18 (6.8)	37 (14.0)	60 (22.6)	79 (29.8)	71 (26.8)	265
Summer employment	3.744	17 (6.5)	30 (11.5)	56 (21.4)	59 (22.5)	100 (38.2)	262
Referrals from college faculty/staff	3.769	9 (3.4)	31 (11.7)	59 (22.3)	78 (29.5)	87 (33.0)	264
Walk-ins	3.835	6 (2.3)	20 (7.7)	63 (24.1)	94 (36.0)	78 (29.9)	261
Responses from want aids	3.870	9 (3.6)	25 (9.9)	55 (21.7)	65 (25.7)	99 (39.1)	253
Cooperative education programs	3.922	15 (5.8)	19 (7.4)	45 (17.5)	70 (27.2)	108 (42.0)	257
Internship programs	3.937	18 (7.1)	26 (10.3)	37 (14.7)	44 (17.5)	127 (50.4)	252
Career fairs	3.949	8 (3.1)	21 (8.2)	45 (17.5)	85 (33.1)	98 (38.1)	257
Unsolicited referrals from placement offices	4.046	6 (2.3)	11 (4.2)	40 (15.3)	113 (43.1)	92 (35.1)	262
Part-time employment	4.069	8 (3.1)	19 (7.3)	48 (18.4)	56 (22.2)	128 (49.0)	261
Referrals from campus organizations	4.183	5 (1.9)	16 (6.1)	35 (13.3)	77 (29.3)	130 (49.4)	263
Professional journals	4.317	0 (0.0)	11 (4.4)	32 (12.9)	73 (29.3)	133 (53.4)	249
Job listings with employment agencies	4.324	8 (3.1)	19 (7.3)	24 (9.2)	40 (15.3)	171 (65.3)	262
Referrals from community groups	4.424	0 (0.0)	6 (2.3)	30 (11.5)	73 (27.9)	153 (58.4)	262
GRAND MEAN	3.846						

OBSERVATIONS: When recruiting minority college graduates, the most successful methods according to the surveyed employers were on-campus interviewing, referrals from current employees in their organizations, and write-ins. The first of these received a rating of high success and the latter two received ratings of medium success. All the other methods listed in this question received a rating of low success. None of the methods received a rating of no success. The level of success ratings received by each method are listed above.

In your organization, do liberal arts and social science majors reach parity in salary and job classification with technical graduates five to ten years after graduation?

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
YES	1	109	25.5	48.0	48.0
NO	2	118	27.8	52.0	100.0
	0	201	47.0	MISSING	
	TOTAL	428	100.0	100.0	
MEAN	1.520				
VALID CASES	227	MISSING CASES 201			

OBSERVATIONS: Of the surveyed employers, only 53% responded to this question. Of those who responded, they were split almost evenly on their opinions. Of those responding, 48.0% believed that liberal arts and social science majors reached parity in salary and job classification with technical graduates five to ten years after graduation. The other 52.0% disagreed.

In your organization, do liberal arts and social science majors reach parity in salary and job classification with technical graduates five to ten years after graduation? Absolute frequencies are listed for each answer on the first line, row percentages on the second line, column percentages on the third line, and percentages of total on the fourth line of each block.

ANSWERS

	COUNT ROW PCT COL PCT TOT PCT	YES	NO	ROW TOTAL
		1	2	
ACCTNG	1	2 20.0 1.9 9	8 80.0 7.0 3.6	10 4.5
AEROSPACE	2	0 0.0 0	7 100.0 6.1 3.2	7 3.2
AGRIBUS	3	3 50.0 2.8 1.4	3 50.0 2.6 1.4	6 2.7
AUTO	4	2 25.0 1.9 9	6 75.0 3.2 2.7	8 3.6
BANKING	5	16 80.0 15.1 7.2	4 20.0 3.5 1.8	20 9.0
CHEM	6	4 57.1 3.8 1.8	3 42.9 2.6 1.4	7 3.2
CONSTRUC	8	4 36.4 3.8 1.8	7 63.6 6.1 3.2	11 5.0
EDUC	9	11 73.3 10.4 5.0	4 26.7 3.5 1.8	15 6.8
COMPTRS	10	8 66.7 7.5 3.6	4 33.3 3.5 1.8	12 5.4
ELECTRNC	11	2 14.3 1.9 9	12 85.7 10.4 5.4	14 6.3
FOOD	12	5 45.5 4.7 2.3	6 54.5 3.2 2.7	11 5.0
GLASS	13	5 83.3 4.7 2.3	1 16.7 1.9 1.3	6 2.7

ANSWERS

	COUNT ROW PCT COL PCT TOT PCT	YES	NO	ROW TOTAL
		1	2	
GOVT	14	2 15.4 1.9 9	11 84.6 9.6 5.0	13 5.9
HEALTH	15	2 50.0 1.9 9	2 50.0 1.7 9	4 1.8
HOTEL	16	9 100.0 8.5 4.1	0 0.0 0 0	9 4.1
MERCHNDS	17	13 76.5 12.3 5.9	4 23.5 3.5 1.8	17 7.7
METAL	18	2 22.2 1.9 9	7 77.8 6.1 3.2	9 4.1
MILITARY	19	1 100.0 1.9 5	0 0.0 0 0	1 1.5
PETRO	20	2 28.6 1.9 9	5 71.4 4.3 2.3	7 3.2
PRINT	21	2 100.0 1.9 9	0 0.0 0 0	2 1.9
UTIL	22	5 38.5 4.7 2.3	8 61.5 7.0 3.6	13 5.9
RSRCH	23	5 38.5 4.7 2.3	8 61.5 7.0 3.6	13 5.9
SERVICE	24	0 0.0 0 0	1 100.0 1.9 5	1 1.5
TIRE	25	0 0.0 0 0	2 100.0 1.7 9	2 1.9
DIVERS	27	1 33.3 1.9 5	2 66.7 1.7 9	3 1.4
COLUMN TOTAL		106 48.0	115 52.0	221 100.0

NUMBER OF MISSING OBSERVATIONS = 207

OBSERVATIONS: According to the surveyed employers a greater parity for liberal arts and social science majors is received with certain categories of employers. This parity is most obvious in the military, printing publishing and informational services, banking finance and insurance companies, educational institutions, electrical machinery and equipment companies, glass paper packaging and allied products companies, hotels motels and recreational facilities, and merchandising and retail services. For the remaining categories of employers, it seems that liberal arts and social science majors do not reach parity in salary and job classification with technical graduates.

When selecting college campuses for the recruitment efforts of your organization, how important are the following factors? Absolute frequencies for each answer are listed on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest.

FACTORS	MEAN SCORE	VERY IMP (1)	HIGH IMP (2)	MED IMP (3)	LOW IMP (4)	NOT IMP (5)	VALID CASES
Quality of graduates prepared by college	1.725	185 (45.9)	163 (40.4)	38 (9.4)	15 (3.7)	2 (.5)	403
Academic majors offered at the college	1.774	171 (42.5)	175 (43.5)	41 (10.2)	6 (1.5)	9 (2.2)	402
Quality of previous hires	1.835	167 (41.1)	172 (42.4)	44 (10.8)	13 (3.2)	10 (2.5)	406
Results from previous recruitment visits	1.903	146 (36.1)	186 (46.0)	47 (11.6)	15 (3.7)	10 (2.5)	404
Academic reputation of college	2.131	87 (21.5)	214 (53.0)	75 (18.6)	19 (4.7)	9 (2.2)	404
Whether college is principally liberal arts, technical, or education	2.305	101 (25.3)	148 (37.0)	102 (25.5)	26 (6.5)	23 (5.8)	400
Respectability of college faculty/staff	2.444	52 (13.0)	189 (47.4)	106 (26.6)	33 (8.3)	19 (4.8)	399
Numbers of new hires needed	2.464	73 (18.3)	152 (38.1)	112 (28.1)	40 (10.0)	22 (5.5)	399
Geographic location of college or university	2.516	75 (18.6)	157 (39.0)	94 (23.3)	42 (10.4)	35 (8.7)	403
Prestige of institution	2.633	33 (8.2)	158 (39.4)	150 (37.4)	43 (10.7)	17 (4.2)	401
Efficiency/effectiveness of placement office	2.658	35 (8.7)	149 (36.9)	154 (38.1)	51 (12.6)	15 (3.7)	404
Degree levels offered	2.697	46 (11.4)	134 (33.3)	150 (37.2)	42 (10.4)	31 (7.7)	403
Proximity of institution to your organization	2.725	65 (16.1)	132 (32.8)	103 (25.6)	55 (13.6)	48 (11.9)	403
Numbers of interviews needed to select best candidate	2.822	40 (10.1)	120 (30.2)	144 (36.2)	59 (14.8)	35 (8.8)	398
Availability of minority graduates	2.853	35 (8.7)	126 (31.3)	143 (35.6)	59 (14.7)	39 (9.7)	402
Availability of female graduates	2.998	24 (6.0)	107 (26.6)	162 (40.3)	64 (15.9)	45 (11.2)	402
Number of graduating students	3.132	19 (4.7)	105 (26.2)	134 (33.4)	90 (22.4)	53 (13.2)	401
To maintain relations with the college	3.253	26 (6.5)	79 (19.8)	134 (33.5)	90 (22.5)	71 (17.8)	400
Alumni in your organization supporting recruitment at their schools	3.394	20 (5.0)	62 (15.5)	131 (32.7)	116 (28.9)	72 (18.0)	401
Total number of students on campus	3.419	10 (2.5)	59 (14.8)	145 (36.3)	124 (31.1)	61 (15.3)	399
Alma maters of management/executives	3.729	8 (2.0)	40 (10.0)	108 (26.9)	143 (35.6)	103 (25.6)	402
GRAND MEAN	2.637						

OBSERVATIONS: When selecting college campuses for the recruitment efforts of their organizations, the surveyed employers indicated that the factors receiving highest importance were quality of graduates prepared by the college, academic majors offered at the college, quality of previous hires, results from previous recruitment visits, academic reputation of the college, whether the college is principally liberal arts, technical, or education, respectability of the college faculty/staff, and numbers of new hires needed. The only factor receiving a rating of low importance was the alma maters of management/executives of the organization. No factors received a rating of no importance. The remaining factors received a rating of medium importance when selecting college campuses for recruitment efforts.

How are your recruiters evaluated for their effectiveness on college campuses?

METHODS OF EVALUATION	NUMBER OF RESPONSES
Not evaluated at all	166
Percentage of hires from referrals	129
Opinions of college placement representatives	80

COMMENTS: As another method for evaluating effectiveness of their college recruiters on campuses, the surveyed employers (43) indicated that results are primarily measured by quality, numbers, retention, and success of individuals referred and hired by the recruiter. Another is the informal feedback of opinions and rapport of the recruiters with interviewees, new hires, faculty/staff, and placement office personnel (14). Still others (4) indicated a ratio of offers per acceptance. Others measured effectiveness by percentages of visits per offer (7). A couple of personnel offices suggested that effectiveness measured by the percentage of office visits declined. This in turn would help measure the interview skills of the recruiter and especially the overall effectiveness. Peer evaluations (5) were used by others, as well as the ability of the recruiter to follow through with contacts to students, faculty, and placement officers (3). Three even measure the quality of public relations generated by the recruiters. Some employers do not evaluate their recruiters since these individuals are scientists, engineers, and accountants. As another measure some employers (4) measure effectiveness based on how well their recruiters write summaries of interviews.

As overall evaluations, some employers rely on the responsible executives in the personnel department to do the evaluations, since recruiting is only part of the overall evaluation process.

Some employers and placement offices distribute opinion questionnaires to students who have interviewed on campus. Through these mailback evaluations or by collecting them in the placement office, students are able to give their comments on the recruiters effectiveness (21). Also similar information is obtained through comments and letters received from students by personnel offices. Still another method is measurement of the recruiters' ability to attain recruitment goals and affirmative action objectives (8). Especially important is knowledge of the whole organization and enthusiasm for the organization. This is most helpful in the public relations aspect of recruitment. Some evaluate recruiters on their interview technique, ability of presence, and presentation. For a gross evaluation of recruiter effectiveness, one employer even evaluates recruiters on numbers of contacts made at a college or university (either students and/or faculty).

OBSERVATIONS: When questioned about evaluation of their recruiters' effectiveness on college campuses, most of the surveyed employers indicated that their recruiters were not evaluated at all. Of those who did evaluate their recruiters, 129 were measuring the percentage of hires from referrals, and another (80) were evaluating the opinions of college placement representatives. The surveyed employers also suggested several other methods for evaluating their recruiters on college campuses. Some of these suggestions might be helpful if personnel directors are considering this possibility.

Where does your organization obtain most of your new college graduates?

SOURCES OF HIRES	NUMBER OF RESPONSES
State college or universities	377
Private colleges or universities	203
Trade, business, or technical institutions	40
Employment agencies	35
Junior Colleges	32

COMMENTS: As other sources of new hires, the surveyed employers mentioned accounts served by their organizations, as well as employee referrals, newspaper advertising and want-ads.

OBSERVATIONS: The primary sources of new college graduates hired according to the surveyed employers were state and private colleges and universities. The majority of the new hires came from these two sources. Just a trickle of new hires were obtained through trade, business, and technical institutions, employment agencies, and junior colleges.

How important are each of the following problems when recruiting new college graduates for employment in your organization? (XHI=extremely high importance, HI=high importance, MED=medium importance, LOW= low importance, NO=no importance) Absolute frequencies for each answer are listed on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest.

PROBLEMS	MEAN SCORE	VERY IMP (1)	HIGH IMP (2)	MED IMP (3)	LOW IMP (4)	NO IMP (5)	VALID CASES
Finding qualified minorities	2.285	132 (32.7)	126 (31.2)	80 (19.8)	31 (7.7)	35 (8.7)	404
Competition for outstanding new college graduates	2.339	101 (25.0)	142 (35.1)	98 (24.3)	49 (12.1)	14 (3.5)	404
Finding qualified recruits	2.417	75 (18.5)	156 (38.5)	113 (27.9)	52 (12.8)	9 (2.2)	405
Convincing recruits to relocate geographically	2.775	59 (14.6)	122 (30.1)	108 (26.7)	83 (20.5)	33 (8.1)	405
Student knowledge about career opportunities	2.807	46 (11.4)	114 (28.1)	142 (35.1)	78 (19.3)	25 (6.2)	405
Vacancies at the time of contact	2.817	58 (14.6)	115 (28.9)	106 (26.6)	80 (20.1)	39 (9.8)	398
Competition with larger organizations	2.829	60 (14.9)	105 (26.0)	124 (30.7)	74 (18.3)	41 (10.1)	404
Finding qualified women	2.870	53 (13.3)	115 (28.8)	110 (27.5)	75 (18.8)	47 (11.8)	400
Organization's identity	2.956	44 (10.9)	99 (24.4)	136 (33.6)	83 (20.5)	43 (10.6)	405
Finding qualified handicapped	2.982	64 (16.0)	96 (24.1)	89 (22.3)	83 (20.8)	67 (16.8)	399
Finding qualified new college graduates within starting compensation constraints	3.072	47 (11.6)	83 (20.5)	115 (28.5)	112 (27.7)	47 (11.6)	404
Finding motivated college graduates	3.116	31 (7.8)	89 (22.4)	117 (29.5)	123 (31.0)	37 (9.3)	397
Opportunity for further academic work	3.549	6 (1.6)	48 (12.4)	123 (31.9)	146 (37.8)	63 (16.3)	386
GRAND MEAN	2.829						

OBSERVATIONS: When recruiting new college graduates, the following problems received ratings of high importance: finding qualified minorities, competition for new college hires, and finding qualified recruits for available employment opportunities. Several factors received ratings of medium importance. These included convincing recruits to relocate geographically, the students' lack of knowledge about career opportunities, vacancies at the time of campus contact, competition with larger organizations, finding qualified women, and establishing and maintaining the organization's identity on college campuses.

If your organization made grants or contributions to colleges or universities last year (1980-81) (excluding staff benefits) what percentage was given to each of the following areas? Absolute frequencies for each answer are listed on the first line and percentages are listed on the second line. Answers are listed in mean score order from highest to lowest.

AREA	MEAN SCORE	Percentages										CASES
		1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
THIS TABLE IS SORTED IN DECREASING ORDER												
Academic departments	5.3	43	9	3	8	10	5	10	10	12	32	144
Individual students	2.9	29.9	6.3	3.5	5.6	6.9	3.5	6.9	6.9	8.3	22.2	91
Graduate schools	1.9	51.6	17.6	6.6	1.1	5.5	4.4	2.2	2.2	0.0	8.8	92
Placement and career planning departments	1.5	62.0	19.6	8.7	2.2	3.3	1.1	0.0	0.0	0.0	3.3	79
Athletic departments	1.3	69	3	2	1	1	0	1	0	0	2	65
		87.3	3.8	2.5	1.3	1.3	0.0	1.3	0.0	0.0	2.5	
		60	2	1	0	0	0	0	0	1	1	
		92.3	3.1	1.5	0.0	0.0	0.0	0.0	0.0	1.5	1.5	
GRAND MEAN		2.983										

COMMENTS: According to the surveyed employers most grants or contributions are unrestricted when given to colleges or universities (20). Some give their grants to research and development areas (1), or engineering and technical departments including equipment (3). Another example was contributions given by one organization directly to the food science departments of colleges and universities. Other firms give their contributions through matching gifts, and their money "follow" employees gift (3). Two employers (2) give their contributions to minority areas. One makes their contribution through research fellowships and another through scholarships. A couple give their contributions to the business or accounting departments of colleges and universities.

OBSERVATIONS: Of the organizations that give grants to colleges and universities, 144 make their contributions to academic departments. Approximately 50% of their contributions are made in this manner and another 30% of their contributions are given to individual students in the form of fellowships, scholarships, and grants. Approximately 20% of the contributions are made to graduate schools and 10-15% are made to placement and career planning departments. Few contributions are made to athletic departments.

Placement offices are experiencing tighter budgets. In fact, some offices are expected to be self-supporting in the near future. Please give your opinion on the following suggestions for funding placement offices. (SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree.) Absolute frequencies for each answer are listed on the first line and percentages are listed on the second line. Answers are listed in mean score order from lowest to highest.

SUGGESTIONS	MEAN SCORE	STRONGLY AGREE (1)	AGREE (2)	NEUTRAL (3)	DISAGREE (4)	STRONGLY DISAGREE (5)	VALID CASES
Seek contributions from employers and foundations	2.362	93 (23.4)	156 (39.2)	94 (23.6)	22 (5.5)	33 (8.3)	398
Charge employers an established fee for each interviewing schedule on campus	3.612	18 (4.5)	90 (22.8)	67 (16.8)	78 (19.3)	146 (36.6)	399
Charge students for registering with placement offices	3.702	11 (2.8)	87 (21.8)	67 (16.8)	79 (19.8)	155 (38.8)	399
Charge students for interviews held with employers	4.166	5 (1.3)	41 (10.5)	46 (11.7)	92 (23.5)	208 (53.1)	392
GRAND MEAN	3.458						

OBSERVATIONS: When rating suggestions for helping placement offices become self-supporting in the near future, the surveyed employers suggested that placement offices seek contributions from employers and foundations as their strongest option. They disagreed that employers should be charged an established fee for each interviewing schedule on campus, that students should be charged for registering with placement offices, and that students should be charged for interviews held with employers. None of the suggestions received a rating of strong disagreement.

In your opinion how early in a student's education should discussion of careers begin?

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
KNDGRTH	1	30	7.0	7.2	7.2
1ST	2	12	2.8	2.9	10.1
2ND	3	4	.9	1.0	11.1
3RD	4	9	2.1	2.2	13.3
4TH	5	9	2.1	2.2	15.5
5TH	6	22	5.1	5.3	20.8
6TH	7	50	11.7	12.1	32.9
7TH	8	43	10.0	10.4	43.2
8TH	9	37	8.6	8.9	52.2
9TH	10	72	16.6	17.4	69.6
10TH	11	61	14.3	14.7	84.3
11TH	12	32	7.5	7.7	92.0
12TH	13	15	3.5	3.6	95.7
FRESH	14	5	1.2	1.2	96.9
SOPH	15	10	2.3	2.4	99.3
JR	16	3	.7	.7	100.0
	0	13	3.0	MISSING	
OUT OF RANGE		1	.2	MISSING	
	TOTAL	428	100.0	100.0	
MEAN	8.560				
VALID CASES	414		MISSING CASES	14	

OBSERVATION: As an overall rating, the surveyed employers believed that discussions of careers should begin as early as eighth grade in secondary schools. In fact 7.2% of the respondents suggested that discussion of careers should begin in kindergarten, 2.9% suggested the first grade, 1.0% the second grade, 2.2 % the third grade, 2.2 % the fourth grade, 5.3% the fifth grade, 12.1% sixth grade, and 10.4% the seventh grade. None of the responding organizations suggested that career discussion should begin as late as the senior year of college. In fact, 95.7% of the surveyed employers suggested that discussion of careers begin in the twelfth grade of high school or earlier.

What do you consider to be the single most persistent problem you have when visiting college placement offices?

COMMENTS: When listing their most persistent problems when visiting college placement offices, the surveyed employers cited the students' lack of information about their organizations and their lack of preparation for interviewing (41). Companies were also critical of students because they lack knowledge about positions available in the employer's organization and were naive about the real world. In several cases employers complained about the lack of literature available to students, even though the employer sent the literature ahead. In at least four instances, the employers sent literature about the company, but the information was stolen or misplaced, and some students weren't able to find any information prior to the interview. The employers next criticism was poor interviewing facilities. In (22) cases, employers cited this inadequacy. This was followed by complaints about poor parking arrangements (21).

When judging placement personnel, they cited lack of professionalism and ineptness (2), insufficient or overloaded staffs (5), a poor quality of staff (5), a lack of time to talk to recruiters or absenteeism of placement directors (11), and one cited discourteous placement personnel.

In judging placement facilities, poor interviewing facilities and parking were the most often critiqued. These were followed by rushed schedules (2), the lack of good interviewing dates (8), and the lack of telephone availability (1). On the lighter side, two different employers mentioned poor coffee in placement offices.

Considering placement operations, the employers cited a lack of organization (13), and coordination. One mentioned that students sometimes feel like a herd of cattle being handled in placement offices. Two employers cited the students' poor attitude toward the placement office and work in general. Also mentioned was poor communication, students not being informed about company dates, and also marginal communications between recruiters and placement officers (7). They also mentioned the lack of information and preparation from students. More and better career counseling was suggested by a few employers. Better self-screening by students was also recommended (4).

When making faculty contacts, the employers needed a list of important persons on campus, and they suggested that this is sometimes not available through placement offices. On several responses, the problem of "no shows" was listed (13). Also students are sometimes not on time for interviews or they sometimes arrive without resumes. Some employers mentioned that graduates with too many opportunities are sometimes spoiled and irresponsible. A few employers (8) suggested that students do not have clearly defined career goals. One mentioned that candidates are sometimes dressed improperly, and three (3) suggested that forms used by placement offices are not always consistent with those used by other colleges and universities. Sometimes the lack of prescreening services is a problem (3). Another group of employers (3) suggested that applications and resumes are not available to recruiters 3 to 5 days ahead of interviewing dates so they may highlight these materials for the campus interview. They also mentioned the trend away from organized lunches with faculty members (2).

Other problems are an inadequate supply of technical graduates (2), partially filled schedules (1), and interviews that are too short (3).

There are always numbers of students who interview just to practice and are not really interested in positions. This was cited (11). The company's identity on campus was another problem mentioned by a few (6). Identifying skilled, realistic, highly motivated, and competent people, especially those who did not sign up for interviews was a problem (12).

Getting the right individuals on interview schedules was also listed (i.e. wrong graduation term, wrong citizenship, wrong majors, and wrong degree levels) (30). Another was the difficulty in a few cases of finding qualified minority candidates and sometimes women graduates (6).

Along the same line, at least six (6) employers wanted to see the achievers without being overwhelmed by unqualified candidates, while keeping peace with the placement offices and maintaining a respectable image on campus.

In at least five instances (5), employers complained that students don't know how to sell themselves. They lack preparation for the interview, fail to read company literature available in the placement office before the interview, and lack career direction.

In general though, the recruiters were pleased with services received from placement offices throughout the country. They commended placement offices for making a real effort to co-operate and make the system work. These employers (35) had no problems with placement offices.

OBSERVATIONS: The surveyed employers provided several excellent recommendations for improvement of placement services around the country. Many of these should be seriously considered.

EMPLOYERS RESPONDING TO SURVEY

- A -

Abbott Laboratories
Abex Corporation
Abitibi Corporation
ACME-Cleveland Corporation
Aetna Life & Casualty
Agway Incorporated
AIR Products & Chemicals Incorporated
AIS Construction Equipment
Alexander Grant & Company
Allen Bradley Company
Allis Chalmers Corporation
Alma Products
Altschuler Melvoin & Glasser
American Federal Savings/Loan
American Electric Power
American General Life
Amerada Hess Corporation
American Electric Power
American Hospital Supply
American Management Systems
Amoco International Oil Company
Anderson Clayton FDS
Aramco Incorporated
Armour & Company
Armstrong Machines
Arthur Anderson & Company
Arthur Young & Company
Atchison Topeka & SA

- B -

BF Goodrich Chemical Company
BF Goodrich Company
Babco & Wilcox
Badische Corporation
Bank For Cooperative
Bank of Commonwealth
BASF Wyandotte Corporation
Becton Dickinson
Beech Aircraft
Belks Stores Service
Bell & Howell Company
Bell System
Bernard Loving & Company
Bethlehem Steel Corporation
Bishop Buffets Incorporated
Black & Veatch
Bloom Engineering Company
Bob Evans Farms Restaurants
Boeing Company
Bonnie Bell
Booker Associates Incorporated
Booz Allen & Hamilton
Boston Edison
Bridgeport Spaulding Public Schools
Broder Feinberg Suke
Brown & Root Incorporated
Budd Company
Bunker Ramo Corporation
Burlington Northern
Burroughs Corporation

- C -

CAI
C L Frost & Sons
Canonic Offshore
Carnation
Ceco Corporation
Celanese Corporation
Cenex
Cessna Aircraft
Champion International Corporation
Charles Stark Draper
Chrysler Corporation
CibaGeigy Corporation
City National Bank
City of Los Angeles
Clark Division Dresser Incorporated
Cleveland and Electric Illumination
Climax Molybdenum
Comptrol of Currency
Cone Mills Corporation
Consolidated Natural Gas
Consumers Power Company
Continental Grain Company
Continental Illinois Bank
Cooper Energy Service
Coopers & Lybrand
Coors Industries
Cordis Dow Corporation
Corning Glass Works
Crowe Chizek & Company

- D -

Danielson Schultz
Danners Incorporated
Dart & Kraft, Incorporated
Davey Tree Expert Company
Davy McKee Corporation
Defense Commercial Engineering Co
Defense Mapping Agency
DeKalb Agrisearch
Deloitte Haskins & Sells
Detroit Bank & Trust
Detroit Police Department
Diamond Shamrock Corporation
Donnelley Mirrors
Dravo Corporation
Dresser Industries

- E -

E G & G Idaho Incorporated
E R Squibb & Sons
ESL Incorporated
Eastman Kodak Company
Eaton Corporation
Edison Brothers Shoe
Education Testing Services
Eli Lilly & Company
Emerson Electric Company
Ernst & Whinney
Essex Group Incorporated
Evans Products Company
Excell Industries Incorporated
Exxon Company USA

- F -

F Joseph Lamb Company
Famous-Barr Company
General Deposit Insurance
Federal Highway Administration
Federal Land Bank
Federated Mutual Insurance
Fema Corporation
Fermi National Accelerator Laboratory
First American Bank
First Finan Group
First National Bank St Paul
Florida Steel Corporation
Ford Motor Credit Company
Foremost Insurance Company
Formation Incorporated
Fort Worth National Bank
Foxboro Company
Furrs Cafeterias Incorporated

- G -

Gab Business Service
Gantos
Garden Millieu
Gatx Corporation
General Motors Corporation
General Telephone Company Wisconsin
General Tire & Rubber Company
Geneva Corporation
Genrad Incorporated
Gerbel Maki and Butzbach
Gerber Products Company
Gilbert Robinson Incorporated
Gilman Commonwealth
Goodyear International Corporation
Goulds Pumps Incorporated
Guardian Industries
Gulf Oil Corporation

- H -

H C Prange Company
Halliburton Services
Hallmark Cards Incorporated
Harris Corporation Data
Hartland Schools
Henry Ford Hospital
Herman Maclean & Company
Hewlett-Packard Company
Hilshire Farm Company
Hilton Hotels Corporation
Homewood Corporation
Honeywell Incorporated
Hooker Chemical & Plastics
Hopper Associates
Horace Mann Education
Horton Nurseries
Host Enterprise Incorporated
Host International Incorporated
Hughes Aircraft
Hungerford Cooper
Hyatt Hotel Corporation
Hygrade Food Products
Hyster Company

- I -

I Magnin & Company
IC Industries Incorporated
Idaho First National Bank
Illinois Agricultural Association
Illinois Department Transportation
Illinois Environmental Protection Agency
Illinois Power Company
Indiana & Michigan Electric Company
Information International
Inland Steel Company
Intercontinental Hotels
International Multifoods Corporation
ITT Aerospace Optical Division
ITT Business Communication
ITT Gilfillan

- J -

J B Robinson Jeweler
J Hancock Mutual Life
J Ray McDermott & Company
J Riggings Incorporated
J Walter Thompson Company
Jackson Laboratory
Jacobson Stores Incorporated
Jervis B Webb Company
Jobar Incorporated
John H Harland Company
Johns Mansville Corporation

- K -

KCL Corporation
Keeler Brass Company
Keithley Instruments
Kent-Moore Corporation
Kinark Corporation
Koch Refining
Kohl's Department Stores

- L -

Laventhol & Horwath
Lear Stegler Incorporated
Lettuce Entertain You
Levys
Libbey Owens Ford Company
Life Of Virginia
Limbach Company
Little Caesar Enterprises
Lockheed
Lockheed Missiles
Lockheed-California
Lyle D Hepfer & Company

- M -

M O'Neil Company
MIT Lincoln Laboratory
Maccabees Mutual Life
Magic Pan
Main Hurdman
Majors Corporation
Management Information
Manufacturers Hanover

Manufacturers Hanover Mortgage
Marianne
Markem Corporation
Marquis Hotels & Restaurant
Marriott Corporation
Marriott's Great AMF
McCafferty & Hogan
McDonnell Douglas
McGraw Edison Company
McLouth Steel Corporation
Mead Johnson & Company
Mellon Bank
Memorex Corporation
Mercantile Trust Company
Mercy Hospital
Metcalf & Eddy Incorporated
Michigan Dept of Natural Res
Michael Reese Hospital
Missouri Pacific Railroad
Moore Products Company
Moorman Feed Man Company
Morrison Incorporated
Morse Chain Division
Motor Wheel Corporation
Motorola Incorporated
Mt Sinai Hospital Cleveland
Muskegon Piston Ring

- N -

NASA Ames Resources Center
NASA Lewis Resource Center
NCR Corporation
Nabisco Resources & Development
Nash Finch Company
National School Studios
National Security Agency
Naval Air Station
Naval Weapons Center
Neiman Marcus
Nekoosa Papers Incorporated
New York State Dept Transportation
New York State Insurance Dept
Norfolk Western Rail
Northern Indiana Public Services
Northern Natural Gas
Northrup King & Company
Noteman Pierce Cox

- O -

Ohio Bicycle Division Huff
Ohio Dept Administration Services
Old Kent Bank Trust
Omark Industries
Oaco Drug Incorporated
Owens Corning Fiberglass
Owens Illinois Incorporated

- P -

PPG Industries
Pacesetter Bank & Trust
Pac Technology Corporation
Parke Davis
Paul Revere Life Insurance
Peabody Coal Company

Peat Marwick Mitchell
Pennsylvania Civil Service Commission
Peoples Gas Light Company
Pfizer Genetics
Phillips Petroleum
Phoenix Mutual
Pittsburgh National Bank
Plante and Moran
Procter & Gamble
Production Credit Association
Professional Service Industries
Pullman Kellogg

- R -

R R Donnelley & Sons
Racal Milgo Incorporated
Radian Corporation
Radisson Hotel
Rauland Division Zenith
Raytheon Company
Rehmann Robson Osburn & Company
Reliance Electric Company
Republic Packaging
Reynolds Metal Company
Richards Manufacturing Company
Richardson Vicks Incorporated
Rockwell International
Rockwell International Auto
Rodeway Inns International
Rust Engineering
Ryan Homes Incorporated

- S -

S C Johnson & Sons Incorporated
Saga Corporation
Saint John Hospital
Samsonite Corporation
Santa Fe Railway Company
Sargent & Lundy Engineers
Savon Drugs Incorporated
Schneider Transport
Scientific-Atlanta
Scovill Incorporated
Sentry Insurance Corporation
Shell Companies
Shillito
Southwestern Company
Southwestern Public Service
Sperry New Holland
Sterling Winthrop
Structural Dynamic Resources
Sun Company Incorporated
Sunbeam Corporation
Sunbeam Plastics
Sundstrand Corporation
Systems Research Incorporated

- T -

T Miller Corporation
Tektronix Incorporated
Tenneco Automotive
Texas Utilities Service
Thiokol Corporation Wasatch
Timken Company

Trans World Airlines
Transco Companies
Travenol Labs
Turner Construction
Tyler Refrigeration
Tymshare Incorporated

- U -

Union Pacific
United Energy Resources
United Telephone Ohio
Universal Oil Products
University of Michigan
Upjohn Company
US Action/Vista/Peace Corps
US Air Force
US Department of Commerce
US Department of HUD
US Fire Insurance Companies
US Gypsum Research
US Internal Revenue Service
US Marine Corps
US Patent & Trademark
US Postal Rate Commission
US Smithsonian Institute

- V -

Vermeer Manufacturing Company
Vidosh Brothers

- W -

W B Johnson Properties
Wausau Insurance Companies
West Company Incorporated
Westin Hotels
Westinghouse Electric Company
Weyerhaeuser Company
Wheel Horse Products
Wickes Lumber Company
Winkelmans

- Y -

York Air Condition

- Z -

Zino Incorporated